

**AT
THE NORTH POLE**

The Fitzroy Edition of

JULES VERNE

Edited by I. O. Evans



A FLOATING CITY
THE BEGUM'S FORTUNE
FIVE WEEKS IN A BALLOON
DROPPED FROM THE
CLOUDS
THE SECRET OF THE ISLAND
MICHAEL STROGOFF
THE DEMON OF CAWNPORE
TIGERS AND TRAITORS
FROM THE EARTH TO THE
MOON
ROUND THE MOON
INTO THE NIGER BEND
THE CITY IN THE SAHARA
PROPELLER ISLAND
THE MYSTERY OF ARTHUR
GORDON PYM
20,000 LEAGUES UNDER THE
SEA
AT THE NORTH POLE
THE WILDERNESS OF ICE
JOURNEY TO THE CENTRE
OF THE EARTH
FOR THE FLAG
BLACK DIAMONDS

At The North Pole

Part One of
The Adventures of Captain Hatteras

by
JULES VERNE

★

Edited by
I. O. EVANS
F.R.G.S.



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INTRODUCTION

*Hear now the Song of the Dead—in the North, by the torn berg-edges,
They that still look to the Pole, asleep by their hide-stripped sledges.*

THOUGH Kipling's stirring lines had not been written when this story appeared, they well convey its spirit. That spirit, indeed, prevailed throughout much of the nineteenth century and into the early twentieth: the idea of polar exploration then aroused much the same enthusiasm as space-travel does today. Whatever it might cost in money and human life, and however doubtful its practical value might be, it was regarded as so desirable that any sacrifice it demanded was worth while.

At its outset, however, Arctic exploration had been severely practical: anxious to find an easier trade-route to the rich countries of the Far East than the long and perilous voyage round Cape Horn, adventurers sought it in the north. Not only did they attempt to reach China by coasting North America or the Eurasian land-mass, they even attempted to reach it across the Pole.

Absurd though it now appears, at the time this venture seemed practicable enough. Very little was then known about conditions in the far north: Barentz, when he discovered Spitzbergen, was amazed by its comparative fertility, and there were rumours of an ice-free Polar Basin—that "open sea" which figures so much in Verne's narrative. So Hudson was acting quite reasonably when on his first voyage, in 1607, he set out northwards *en route* for China; and indeed before the ice drove him back he got within 20° of the Pole.

Like other explorers, he was equally unsuccessful when he sought for a North-East Passage, and like them he at last decided that the only possible northern route to the Far East was around the coast of North America. Like many other explorers he lost his life in seeking for it, though unlike them his death was due not to the hazards of the venture but to his crew's treachery. Attempts to find the famous North-West

Passage were continued until early in the seventeenth century, when they were regretfully given up as hopeless.

When the quest was resumed a century later its motive was very different. The North-West Passage was now sought, not as a trade-route to the east—that was obviously out of the question—but for its own sake: for the advancement of science, “for discovery”, or for patriotism. In Britain the quest aroused special enthusiasm; many naval officers, released from duty with the Fleet at the end of the Napoleonic Wars, encouraged by the Government, and sponsored by public-spirited men of wealth, eagerly joined in the search.

Gradually the complicated channels north of Canada were explored from east and west until at last only one short stretch of water was needed to complete the route. This was reached by Sir John Franklin; and though he perished in the attempt to explore this strait, he is usually regarded as the discoverer of the North-West Passage. (This was in fact not traversed throughout its length until 1905, by the Norwegian explorer Raold Amundsen.)

The mystery surrounding the fate of Sir John Franklin stimulated a number of rescue expeditions and thus still further encouraged Arctic exploration. Nor were the British alone in this; in one such expedition the heroic French officer Lieutenant Bellot lost his life; and in the course of another Elisha Kane of the United States Navy discovered to the west of Greenland a practicable channel leading northwards and so helped to divert interest from the discovery of the North-West Passage to that of the North Pole.

Such was the position when Verne wrote his book, and it will be seen how ingeniously he has woven these events into his narrative. He was almost as well-read in the literature of Arctic exploration as his own Dr. Clawbonny; but his extract from the works of Sir Edward Belcher (page 165) is not taken verbatim from the original: he may have been using a French translation. The inscription on the Franklin Memorial (page 122) is quoted from H. D. Traill’s *Life of Franklin*.

It may seem surprising that Verne made his heroes English and not French, but it will be seen as the story progresses that this is not so much a compliment to our people as might be supposed. There is, however, the possibility that its develop-

ment may have taken him by surprise. It was originally serialized, and when its opening chapters appeared he may have intended the promise of its title to be literally fulfilled. As it progressed, however, it may have taken control and developed along unforeseen lines which make that title seem, to put it mildly, inappropriate.

Though the fourth of the "Extraordinary Voyages" to appear in book form, it was actually the second to be written, and it was no anticlimax to its predecessor "Five Weeks in a Balloon".¹ Unlike the two other stories which preceded it as books, "Journey to the Centre of the Earth" and "From the Earth to the Moon",¹ it was not science fiction, but it is one of the finest of Verne's stories of heroic adventure in the remote parts of the earth.

It will be seen that it is not complete in itself: it forms the first half of a longer narrative, "The Adventures of Captain Hatteras". From its sequel, "The Wilderness of Ice"¹ the reader may follow the course of those adventures, and so he may at last learn whether there were in fact any "English at the North Pole".

I.O.E.

¹ All the stories mentioned are included in the Fitzroy Edition.

CHAPTER I

THE FORWARD

"TOMORROW, at ebb tide, the brig *Forward*, Captain K.Z. . . . Richard Shandon mate, will sail from New Prince's Docks, destination unknown."

This might have been read in the *Liverpool Herald* of 5th April, 1860.

The sailing of a brig is not of much importance for one of England's largest ports. Who would notice it amidst the vessels of every tonnage and nationality which six miles of docks can scarcely contain? Yet from daybreak on 6th April, a large crowd thronged the wharfs where all the sailors of the town seemed to have met. Dock-labourers had left their work, merchants their dingy counting-houses, tradesmen their shops. Every minute a bus arrived with its load of sightseers; the whole town seemed to have but one idea, to see the *Forward* set sail.

The *Forward* was a vessel of 170 tons, screw-propelled, and with an engine of 120 horse-power. She might easily have been mistaken for any of the other brigs in the port. But though she seemed quite ordinary to the man in the street, knowledgeable people would have noticed certain features which no sailor could mistake.

On the *Nautilus*, anchored not far away, some seamen were making a thousand guesses about her destination.

"I don't know what to make of her masts," one of them commented. "Steamboats don't usually carry so much sail."

"That ship," explained a quartermaster with a big red face—"that ship will have to depend more on her masts than on her engine, and the topsails are the biggest because the others will often be useless. I haven't the slightest doubt that she's meant for the Arctic or Antarctic seas, where the icebergs blanket the wind more than a good ship likes."

"You must be right, Mr. Cornhill," replied a third sailor. "Have you noticed her stem, how straight it falls into the sea?"

"Yes," said the quartermaster, "and it's sheathed with steel as sharp as a razor, enough to cut a three-decker in two if the *Forward* were to ram her at full speed."

"That's certain," agreed a Mersey Pilot; "for that 'ere vessel makes a good fourteen knots with her screw. It was wonderful to see her cutting along on her trial trip. I tell you, she's a flier."

"The canvas isn't complicated either," answered Cornhill; "it catches the wind, and can be trimmed easily. That ship is going to try the Polar seas, or my name isn't what it is. There's something else, too—have you noticed the width of the helm-port that the rudder-head goes through?"

"That's true enough, but what does that prove?"

"That proves, my boys," said Cornhill with disdainful satisfaction, "that you can't see and you can't think. It proves that they want to give plenty of play to the helm so that they can ship or unship the rudder easily whenever they like. Don't you know how often you have to do that when you have ice to deal with?"

"That's right."

"Besides," the sailor continued, "the way she's loaded confirms that. Clifton—he's one of her crew—tells me she's victualled and fuelled enough for five or six years. Coals and provisions are all her cargo, with bundles of woollen garments and sealskins."

"Then," said the quartermaster, "that settles it; but didn't Clifton say where she's going?"

"He couldn't tell me; he doesn't know; that's the way the crew were signed on. They won't know where they're going till they get there."

"I shouldn't wonder if they were going to the devil, it looks like it."

"And what pay," said Clifton's friend enthusiastically, "five times the usual! If it hadn't been for that, Richard Shandon wouldn't have found a soul to sign on. A queer-looking ship, going nobody knows where, and not looking much like coming back, it wouldn't have suited me."

"Anyhow," Cornhill told him, "you couldn't have been one of her crew."

"And why not?"

"Because you don't fulfil the required conditions. I'm told that all married men were excluded, and you're one of them, so you can shut up, and for you that will be something fresh. Even her name's a challenge. The *Forward*—but forward where to? Besides, nobody knows who her captain is."

"Yes, they do," said a simple-looking young sailor.

"Why, you don't mean to say that you think Shandon is her captain?"

"But . . ." answered the young sailor.

"Why, Shandon's her mate, and nothing else; he's a tough sailor, an experienced whaler, and a fine fellow, quite fit to be captain, but he's no more her captain than you or me. As to who's going to be in command, after God, on board, he doesn't know any more than we do. When the time comes the real captain will turn up, no one knows how nor where, for Richard Shandon hasn't said and he isn't allowed to say what part of the world he's to steer her to."

"But, Mr. Cornhill," continued the young sailor, "I tell you that there is somebody on board—just as it said in the letter which offered Mr. Shandon his job."

"What!" Cornhill frowned, "do you mean to tell me that the *Forward* has got her captain?"

"Yes, Mr. Cornhill. I had this from Johnson, the boatswain: he told me so himself."

"Johnson told you so?"

"He didn't only tell me, he showed me the captain."

"He showed you the captain!" Cornhill was stupefied. "And who is he, if you please?"

"He's a dog."

"A dog? A dog with four paws?"

"That's right."

Stupefaction reigned amongst the crew of the *Nautilus*. Under any other circumstances they would have burst out laughing. A dog to be captain of a vessel of 170-tons burden! It was enough to make them laugh. But really the *Forward* was so strange that it might be no laughing matter, and they felt they ought to think twice before denying it. So Cornhill didn't laugh.

"So Johnson showed you this new sort of captain, did he, and you saw him?"

"Yes, sir, begging your pardon, as plainly as I see you now."

"Well, and what do you think about it?" somebody asked the quartermaster.

"I don't think anything," he answered shortly. "I don't think anything, except that the *Forward* is owned either by the devil or by lunatics fit only for Bedlam."

The sailors continued silently to stare at the *Forward*, whose preparations for setting sail were drawing to an end; there was not one of them who imagined that Johnson had only been laughing at the young sailor. The yarn about the dog had already spread about the town, and several of the spectators were looking out for the dog-captain and fancied he might be supernatural.

Besides, the *Forward* had been attracting public attention for some months past. Her unusually strange build, the mystery which surrounded her, her captain's incognito, the way Richard Shandon had been asked to take charge of her, the care in selecting her crew, her unknown destination, which only a few suspected—everything about her was mysterious.

There is always something moving about a ship's setting sail. The imagination follows her in her struggles with the wind and the waves, in that adventurous journey which does not always bring her to her haven. Even more is this true when there is something unusual about her and her destination is unknown. And though few could speak as knowledgeably as Quartermaster Cornhill, this did not prevent her forming the subject of Liverpool gossip for three whole months.

The ship had been built at Birkenhead, across the Mersey. Her builders, Scott and Co., amongst the foremost in England, had received a specification and detailed plan from Richard Shandon; it laid down her exact tonnage, dimensions, and storage space, and they had realized that they had to do with a consummate seaman.

As Shandon had ample funds at his disposal, the work advanced rapidly, following the owner's requirements. The brig was built solid enough to withstand anything; clearly she was meant to resist enormous pressure, for her ribs were built of teak and were, moreover, reinforced with iron.

Little by little she grew on the stocks, and her qualities of strength and delicacy impressed the connoisseurs. As the

sailors had noticed, her stem was perpendicular to her keel; made of steel, and shining in the sun, it gave her an unusual appearance. A 16-pounder cannon was mounted on her forecastle; but neither the cannon nor the steel-clad stem made her look warlike.

On 5th February, 1860, this strange vessel was launched in the midst of an immense crowd of spectators, and the trial trip was perfectly successful. But if she were neither a warship, a merchant vessel, nor a pleasure yacht—for no yachtsman goes for a cruise with six years' provision in the hold—what was she?

Was she meant for another expedition in search of Franklin? Hardly—for, the preceding year, Captain McClintock had returned from the Arctic with definite proof of the loss of that ill-fated leader. Was she going to seek the famous North-West Passage? What would be the use of that? Captain McClure had discovered it in 1853, and his lieutenant, Cresswell, was the first who had the honour of rounding the American continent from Behring Straits to Davis Straits. Still it was clear to competent judges that the *Forward* was prepared to face the ice. Was she going to the South Pole, farther than the whaler Weddell or Captain James Ross? But, if so, what for?

The day after the brig was launched her engine was sent from Hawthorn's foundry at Newcastle. It was of 120 horsepower, with oscillating cylinders, taking up little space; its power was great for a brig of 170 tons, with so much sail, and with such a turn of speed. Her trials had left no doubt about this, and according to Johnson, the boatswain:

"When the *Forward* uses her engine and sails at once, her sails will get her there first."

This did not sound very clear, but his hearers fancied anything possible for a ship commanded by a dog.

After the engine was installed, the stowage of provisions began. This was no slight task, for the vessel was to carry enough for six years: dried and salted meat, smoked fish, biscuit, and flour, and mountains of tea and coffee were thrown into the holds in avalanches. Richard Shandon presided over the stowing of this precious cargo like a man who knows what he is about; all was stowed away, labelled, and numbered in perfect order. Ample supplies were also embarked of

pemmican, which contains much food value in very small space.

The nature of the provisions left no doubt about the length of the cruise, and the sight of the barrels of lime-juice, lime-drops, and other antiscorbutics confirmed the opinion about its destination; they are essential in Polar navigation. Shandon had no doubt received special instructions about this part of the cargo, to which, along with the medicine-chest, he gave special attention.

Although to the reassurance of timid people, fire-arms were not numerous on board, the powder magazine was so full it scared them. The solitary cannon could not possibly need all that! Here was something to think about. There were also gigantic saws and other powerful tools, levers, leaden clubs, handsaws, enormous axes, without counting enough blasting powder to blow up the Liverpool Customs House. All that was strange, not to say fearful, without mentioning rockets, signal-lights, fireworks, and beacons of a thousand types. The numerous spectators on the wharfs of Prince's Dock also stared at a long mahogany whaler, a tin-plate skiff covered with gutta-percha, and some halkett-boats, made of rubberized containers that can be transformed into canoes by simply inflating them.

Everybody got more and more excited, for with the tide the *Forward* was setting out for her mysterious destination.

CHAPTER II

AN UNEXPECTED LETTER

THE letter received by Richard Shandon, eight months before, ran as follows:

Aberdeen,
2nd August, 1859.

To Mr. Richard Shandon,
Liverpool.

Sir—I beg to advise you that the sum of £16,000 sterling has been placed in the hands of Messrs. Marcuart & Co., the Liverpool bankers. Enclosed are a number of cheques, signed by myself, which will allow you to draw upon the said Messrs. Marcuart for the above-mentioned sum. You do not know me, but that does not matter. I know you: that is enough.

I offer you the post of chief officer on the brig *Forward* for a voyage that may be long and perilous. If you refuse there is no more to be said. If you accept, you will receive a salary of £500, and throughout the voyage it will be increased one-tenth at the end of each year.

The *Forward* is not yet in being. You must have her built so as to be ready for sea at the beginning of April 1860, at the latest. Herewith is a detailed specification and plan; you will adhere to it scrupulously. The ship is to be built by Messrs. Scott and Co., who will settle with you.

I wish you to pay special attention to the choice of the *Forward's* crew: a captain, myself; a chief officer, yourself; a second mate, a boatswain, two engineers, an ice-master, eight sailors, and two stokers, eighteen men in all, including Dr. Clawbonny, of this town, who will introduce himself at the proper time. The crew must consist of Englishmen, all childless, bachelors and sober—for no spirits, not even beer, will be allowed on board—ready to undertake anything, and to endure anything. You will give the preference to men of a robust constitution, with plenty of animal heat. Offer them five times the usual pay, with an increase of one-tenth for each

year of service. At the end of the voyage five hundred pounds will be placed at the disposal of each man, and two thousand at your own. These funds will be placed with Messrs. Marcuart and Co., aforesaid.

The voyage will be long and difficult, but honourable, so you need not hesitate to accept my conditions. Please reply to K.Z., Poste Restante, Goteborg, Sweden.

On the 15th of February next you will receive a large Danish dog, with hanging lips, and a tawny coat with black stripes. You will take him on board and have him fed as instructed. You will acknowledge the arrival of the said dog to me under the same initials as above, Poste Restante, Leghorn, Italy.

The captain of the *Forward* will make himself known when he is needed. When you are ready to sail you will receive further instructions.

The Captain of the *Forward*,
K.Z.

CHAPTER III

DR. CLAWBONNV

RICHARD SHANDON was a fine seaman; for many years he had commanded whalers in the Arctic, and he had a reputation for skill. He might well be astonished at such a letter, and indeed he was, but with the calmness of a man who has seen much. He fulfilled all the required conditions: he had neither wife, child, nor relations; he was as free as a man could be. Having no one to consult, he went straight to Messrs. Marcuat's bank.

"If the money is there," he said to himself, "everything's as good as done."

He was received by the firm with all the attention due to a man who has £16,000 waiting for him; this verified, Shandon asked for a sheet of writing-paper, and sent his acceptance in a large sailor's hand to the address indicated. That very day he got in touch with the Birkenhead shipbuilders, and twenty-four hours later the keel of the *Forward* lay on the stocks.

Richard Shandon was a bachelor of about forty, robust, energetic, and brave, qualities essential to the seaman. He was said to be exacting and hard to please, more feared than loved by his sailors. But this reputation did not make it difficult for him to find a crew, for he was known to be a born leader. Fearing that the mysterious nature of the enterprise would embarrass him, he reflected, "The best thing I can do is to say nothing at all; there are sea-dogs who will want to know the why and the wherefore of the business, and as I don't know anything myself, I can't tell them. This K.Z. is a queer fish, but after all he knows me, and he trusts me; that's enough. As to the ship, she'll be a handsome lass, and my name isn't Richard Shandon if she isn't meant for the Arctic. But I'll keep that to my officers and myself."

Then he set about recruiting his crew as stipulated. He knew a brave experienced sailor, James Wall, who was about thirty, and had made more than one voyage north. Shandon offered

him the post of second mate, and he accepted blindly; all he cared about was setting sail, for he was devoted to his profession. Shandon told him and Johnson, whom he had engaged as boatswain, all he knew about the business.

"Just as soon go there as anywhere else," answered Wall. "If it's to look for the North-West Passage, many others have done so and they've come back."

"Not all of them," Johnson corrected him, "but that's no reason why we shouldn't go."

"Besides, if we aren't mistaken," said Shandon, "the voyage will be under splendid conditions. The *Forward's* a bonny lass, and with a good engine she'll go far. Eighteen men are all the crew we want."

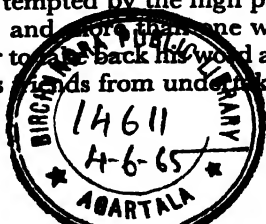
"It's queer," commented Wall, "that there's always somebody trying to get from Davis Straits to Behring Straits. The Franklin rescue expeditions have already cost England more than seven hundred and sixty thousand pounds without accomplishing anything. Who the devil means to risk his fortune in such an enterprise?"

"We're simply guessing," said Shandon. "I don't know if we are really going northwards or south. Perhaps we're setting off on a voyage of exploration. A fellow called Dr. Clawbonny is coming one of these days, and he'll have orders for us. Then we'll see."

"Then we've simply got to wait," answered Johnson; "I'll go and hunt up some likely fellows, and as to their animal heat, I'll take care of that."

Johnson was a valuable acquisition, experienced in navigating in these high latitudes. He had been quartermaster on the *Phoenix*, one of the vessels sent out in 1853 in search of the Franklin expedition, and he had been present at the death of the French lieutenant, Bellot, whom he had accompanied in his journey across the ice. He knew the Liverpool seamen, and at once set out on his recruiting expedition.

Shandon, Wall, and he did their work so well that the crew was complete by the beginning of December. It had been difficult; many, tempted by the high pay, had been scared by the uncertainty, and more than one who had enlisted boldly came along later to take back his word and refund his advance, dissuaded by his friends from undertaking such an enterprise.



Rs 10.00

All of them tried to solve the mystery, and worried Shandon with questions; he sent them to Johnson.

"I can't tell you what I don't know," he told them, "I don't know any more than you do. You'll be in good company, and that's something. You can take it or leave it."

And most of them took it.

"I've got plenty to choose from," said the boatswain; "such pay is unheard-of, to say nothing of what's waiting for us when we get back. That's something to make one's mouth water.

"I don't pretend," he continued, "that the cruise won't be long, painful, and perilous; that's clearly set out in our instructions and you ought to know what you're in for; you'll very likely have to do everything that's humanly possible, and perhaps a bit more. So if you aren't ready to face anything, if you haven't a bit of a devil in you, if you're scared of a bit of danger, you'd better make room for someone else."

"But, Mr. Johnson," protested a sailor, "surely you know who the captain is, at any rate?"

"The captain is Richard Shandon till we get someone else."

Richard Shandon, to tell the truth, hoped that this was so, and that at the last moment he would get precise instructions where he was to take the *Forward*. He did all he could to spread this idea when he talked with his officers, or when he watched the brig under construction in the Birkenhead dock-yard, looking like the ribs of a whale turned upside-down.

Shandon and Johnson kept strictly to their instructions as to the health of the sailors they enrolled; these all looked hale and hearty, and had enough heat in their bodies to drive the engine; their supple limbs, their clear and florid complexions, were fit to withstand the action of intense cold. They were confident and resolute, energetic and solidly built. Naturally, they were not all equally vigorous; Shandon had even hesitated about taking some of them, the sailors Gripper and Garry, and the harpooner Simpson, because they looked rather thin; but, on the whole, their physique and circulation were good, and so they signed the ship's articles.

All the crew belonged to the same Protestant church; during these long voyages communal prayer and the reading of the Bible have a good influence over the men and sustain them in times of discouragement; so it was essential that they should

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be all of the same way of thinking. Shandon knew by experience the utility of these services, and their moral influence on the crew; they are always adopted on ships intended to winter in the Polar Seas.

The crew once got together, Shandon and his two officers set about obtaining the provisions; they strictly adhered to their instructions, which were clear, precise, and detailed, even the least important being described in quality and quantity. Thanks to the cheques the commander held, every article was paid for at once with a discount of eight per cent, carefully placed to the credit of K.Z.

Crew, provisions, and cargo were ready by January 1860; the *Forward* began to look shipshape, and Shandon went daily to Birkenhead.

On the morning of 23rd January he was, as usual, aboard one of the Mersey ferry-boats; there was the usual thick fog, and the sailors had to steer by compass, though the crossing lasts scarcely ten minutes. But the density of the fog did not keep Shandon from seeing a shortish man, rather fat, with an intelligent and merry face and an amiable expression. This man came up to him, took him by both hands, and shook them with an ardour, a briskness and a familiarity "quite meridional", as a Frenchman would have said.

If this person did not come from the Midi, he looked like it; he talked and gesticulated volubly; his thoughts had to escape or they would have blown him up. His eyes, small as those of intelligent men often are, his mouth, large and always in motion, were safety pipes which allowed him to give vent to them; he talked, and talked so much and so fast that Shandon couldn't understand a word he said. However, the *Forward's* mate soon recognized this little man whom he'd never seen before; a thought shot into his mind like lightning, and when the other paused to take breath, Shandon made haste to get out the words, "Doctor Clawbonny?"

"Himself in person, Commander! I've been at least a quarter of an hour looking for you, asking everybody everywhere! Imagine my impatience! five minutes more and I should have lost my wits! And so you are Commander Richard? You really exist? You aren't a myth? Your hand, your hand! I want to shake it again. Yes, it's Richard Shan-

don's hand, and if there is a Commander Richard, there's a brig *Forward* for him to command; and if he commands her she'll set sail, and if she sets sail she'll take Dr. Clawbonny with her."

"Well, yes, Doctor, I am Richard Shandon; there is a brig *Forward*, and she'll set sail."

"That's logic," answered the doctor, after taking a deep breath of air—"that's logic. And you see how pleased I am at having my wishes gratified. I've always wanted to undertake such a voyage. Now with you, Commander——"

"But let me . . ." began Shandon.

"With you," continued Clawbonny, without listening, "we're sure to go far and not to draw back for a mere trifle."

"But——" Shandon began again.

"For you have shown what you're made of, Commander; I know what you've done. You're a fine sailor!"

"If you'll let me——"

"No, I won't have doubts cast on your courage, your initiative, your skill, not even by yourself, not even for a moment. The captain who chose you for his mate is a man who knows what he's about, I can tell you."

"But that's nothing to do with it," said Shandon, impatiently.

"What is it, then? Don't keep me in suspense any longer."

"You don't give me time to speak, devil take it! Please tell me, Doctor, just how it is that you're to take part in the expedition?"

"Through this letter, a splendid letter, the letter of a brave captain—very short but quite long enough."

He held it out.

Inverness,
22nd January, 1860.

To Dr. Clawbonny,
Liverpool.

If Dr. Clawbonny wishes to embark on the *Forward* for a long voyage, he may introduce himself to the commander, Richard Shandon, who has received orders about him.

The Captain of the *Forward*,
K.Z.

"This letter reached me this morning, and here I am, quite ready to embark."

"But at least, Doctor, you know where we're going?"

"Not a bit of it and I don't care so long as I go somewhere. They say I'm a learned man; they are mistaken, Commander. I don't know anything, and if I've published a few books that don't sell badly, I oughtn't to; the public is very good to buy them! I don't know anything, I tell you. I'm only an ignorant man. When I have the offer of completing, or rather of refreshing, my knowledge of medicine, surgery, history, geography, botany, mineralogy, conchology, geology, chemistry, physics, mechanics, and hydrography, well, I accept, and you don't have to ask me twice!"

"Then," Shandon was disappointed, "you don't know where the *Forward* is bound for?"

"Yes, I do; she's bound for somewhere where there's something to learn, to discover, and to compare—where we shall meet with other customs, other countries, other nations, to study their everyday lives; she's going, in short, where I've never been."

"But nowhere special?"

"Well, I've heard that we're bound for the North. So northwards let us go!"

"At least," asked Shandon, "you know the captain?"

"Not the least bit in the world! But he is a fine man, you can take my word for it."

The mate and the doctor disembarked at Birkenhead: the former explained all he knew, and the mystery inflamed the doctor's imagination. To see the brig threw him into transports of joy: from that day forth he stayed with Shandon, and every day he visited the *Forward's* hull.

He had been appointed to take charge of the ship's medicine-chest, for Dr. Clawbonny was a doctor, and a good one, though he practised little. At twenty-five he had been a general practitioner; at forty he was a savant, well known in the town, an influential member of all its Literary and Scientific Society. He was in a position to give medical advice which was none the worse for being gratuitous; beloved as so lovable a man ought to be, he had never done any harm to anyone, not even to himself; lively and talkative, he carried

his heart in his hand, and put his hand into everybody else's.

When it became known in Liverpool that he was going to embark on the *Forward* his friends did all they could to dissuade him, but all they did was to increase his determination, and when the doctor was determined no one could stop him.

Thereafter, the surmisings and misgivings increased, but they did not keep the *Forward* from being launched on 5th February, 1860. Two months later she was ready to put to sea.

On 15th March, as the captain's letter had announced, a dog of Danish breed arrived from Edinburgh, addressed to Richard Shandon. The animal seemed surly, morose, and even a little sinister, with a strange expression in his eyes. The word "*Forward*" was engraved on his brass collar. The commander took him on board and acknowledged his arrival to K.Z. at Leghorn.

Thus, except for the captain, the crew was complete:

1, K.Z., captain; 2, Richard Shandon, first mate; 3, James Wall, second mate; 4, Dr. Clawbonny; 5, Johnson, boatswain; 6, Simpson, harpooner; 7, Bell, carpenter; 8, Brunton, chief engineer; 9, Plover, second engineer; 10, Strong (a negro), cook; 11, Foker, ice-master; 12, Wolsten, smith; 13-17, Bolton, Garry, Clifton, Gripper, Pen, sailors; 18, Warren, stoker.

CHAPTER IV

THE DOG CAPTAIN

ON 5th April came sailing-day. The doctor's arrival had given the crew more confidence: they knew that where he went they could follow. However, they were still uneasy, and Shandon, fearing that some of them would desert, wanted to be off. With the shore out of sight, they would settle down.

Dr. Clawbonny's cabin occupied all the stern of the vessel. Those of the captain and the mate gave upon the deck. The captain's had been sealed, after being fitted up with instruments, furniture, clothing, books, and so forth, in accordance with a detailed list. At his request the key had been sent to Lubeck; so he alone could enter his room.

This annoyed Shandon, for it militated against his hopes of assuming command. His own cabin had been perfectly adapted for the probable voyage, for he fully understood the needs of a Polar expedition. The second mate's cabin was beside the forecastle, which formed a large dormitory for the sailors; they were very comfortably lodged, and would not have found anything like the same amenities on any other ship. They were provided for like a valuable cargo: a vast stove filled the centre of the room.

Dr. Clawbonny was in his element; he had taken possession of his cabin on 6th February, the day after the *Forward* was launched.

"The happiest of animals," he said, "would be a snail, if it could make a shell exactly to its liking; I shall try to be an intelligent snail."

And as the shell was to be his lodging for some time, the cabin became a home; the doctor took a savant's childish pleasure in arranging his scientific gear. His books, his drugs, his cases, his mathematical instruments, his chemical apparatus, his thermometers, barometers, hydrometers, rain-gauges, field-glasses, compasses, sextants, maps, plans, flasks, and his medicine-chest, were all arranged in an order that would have put the British Museum to shame. These six square feet con-

tained incalculable riches: without having to move, the doctor had only to stretch out his hand to become a physician, a mathematician, an astronomer, a geographer, a botanist, or a conchologist. He was proud of his skill in arranging his possessions, and delighted with his floating study, which three of his thinnest friends would have been enough to fill. So many of his friends, indeed, came to see that even a man as easy-going as the doctor got tired of it; he might have ended by saying, after the style of Socrates: "My house is small, but Heaven send that it's never full of friends!"

The dog-kennel was placed under the window of the mysterious cabin, but its savage inhabitant preferred to wander between decks and in the hold; it seemed impossible to tame him, and no one had been able to make friends with him; at night he howled lamentably, filling the vessel with sinister echoes.

Was he sorrowing for his absent master? Did he feel instinctively that he was starting on a dangerous voyage? Had he a presentiment of future peril? The sailors decided that he had, and more than one of them said, quite seriously, that the dog was in league with the devil.

Pen, a brutal man, had been going to hit him when he was unlucky enough to fall against the capstan, which cracked his head open, and of course this accident was credited to the fantastic animal. Clifton, the most superstitious of the crew, pointed out uneasily that when the dog was on the poop he always walked on the windward side, and that when he went about, the astonishing animal crossed to the other side just as the captain would have done.

Dr. Clawbonny, whose kindness and caresses would have tamed a tiger, tried in vain to win the dog's good graces: he lost both time and pains. The animal did not answer to any name ever written in the canine calendar, and the crew ended by calling him Captain, for he seemed quite familiar with marine customs; plainly this was not his first voyage. Thus it is easy to understand the boatswain's reply to Clifton's friend, and the credulity of those who heard it, some of them said facetiously that he expected to see the dog take human shape and to assume command in a stentorian voice.

Though Shandon did not share these apprehensions, he was

not without anxiety, and the evening before they set sail, he had had a discussion in the saloon with the doctor, Wall, and Johnson. They were enjoying their tenth grog, which would probably be their last, for the captain's letter had ordered that all the crew, from himself down to the stoker, should be teetotallers, and that there should be neither wine, beer, nor spirits on board except those issued by the doctor's orders. The conversation turned to the vessel's departure when, if the instructions of the captain were to be carried out, Shandon would receive his final orders.

"If the letter," he said, "doesn't give me the captain's name, it must at least tell me our destination, or I shan't know where to take her."

"If I were you," the doctor told him impatiently, "I should start even without a letter; it'll know how to follow you, be sure of that."

"You're ready for anything, Doctor; but if so, what part of the globe would you make for?"

"The North Pole, of course; there's not the slightest doubt about that."

"No doubt about it?" asked Wall. "Why not the South Pole?"

"The South Pole—never! Would the captain be likely to send a brig right down the Atlantic? Just think it over, my dear Wall."

"The doctor's got an answer for everything," Wall replied.

"Well, we'll say North," continued Shandon. "But what part of the north? Tell me, Doctor, Spitzbergen or Greenland? Labrador or Hudson Bay? Although they'd all end up among impenetrable icebergs, there's quite a lot of them, and I shouldn't know which to take. Can you answer that, Doctor?"

"No, but if you don't get a letter what shall you do?"

"I shan't do anything."

"Do you mean to say you won't start?" cried Dr. Clawbonny, shaking his glass despairingly.

"No, I won't."

"And that would be the best thing," Johnson replied quietly, as the doctor, unable to keep still, began parading round the table, "but still, if we wait too long, results may be unpleasant; it's the right time to sail now if we're really going

north, as we ought to take advantage of the breaking up of the ice to traverse Davis Straits; besides, the crew are getting more and more uneasy; their friends are urging them to leave the *Forward*, and they may have a bad influence."

"Besides," added Wall, "if they start to get panicky, they'll all desert, and I don't know where you'd get another crew."

"But what am I to do?" asked Shandon.

"Just what you said," replied the doctor; "wait till tomorrow before you give up. So far all the captain's promises have been fulfilled with the greatest regularity, and there's no reason to believe we shan't be told our destination at the proper time. I haven't the slightest doubt that tomorrow we'll be sailing across the Irish Channel, and I suggest we drink the last of our grog to a pleasant voyage. It begins unaccountably, but with sailors like you there's a thousand chances it will end well."

And they drank to their safe return.

"Now, Commander," continued Johnson, "if you'll let me advise you, you'll get everything ready to start, the crew must think that you know what you're at. Tomorrow, whether you get a letter or not, set sail: don't get steam up, the wind looks like holding out; let the pilot come on board; then leave the docks with the tide, and anchor off Birkenhead; our men won't be able to get in touch with the shore, and if this devil of a letter comes it will find us as easily there as anywhere else."

"That's the idea, Johnson," the doctor exclaimed.

"All right," replied Shandon. They all went off to their cabins and slept uneasily until sunrise.

Next day came the post, but not one of the letters was addressed to Shandon. But he got ready to sail, and the news at once spread all over Liverpool, bringing that extraordinary concourse of spectators to the docks. A number of visitors came on board to shake hands for the last time with a comrade, to try to dissuade him from sailing, or to take a look at the brig and to learn its destination; they were disappointed at finding the commander more taciturn and reserved than ever. He had plenty of reason for that.

Ten o'clock struck, and then eleven. The ebb began about one in the afternoon. Shandon was looking uneasily at the crowd, trying to read his destiny on one of the faces. But in

vain. The sailors carried out his orders in silence, staring at him and waiting for the letter which did not come. Johnson went on getting ready to set sail. The weather was cloudy and the sea rough; a south-easter blew strongly, but it would be easy to get out of the Mersey.

At twelve nothing had been received. Dr. Clawbonny marched up and down in agitation, looking through his telescope, gesticulating, impatient, as he said, for the sea. In spite of himself he couldn't help feeling moved.

Shandon bit his lips till the blood came as Johnson went up to him and said: "Commander, if we want to take advantage of the tide, there's no time to lose; we shan't be clear of the docks for at least an hour."

Shandon gave a last glance round him once more and consulted his watch. The midday post had been delivered. "Go ahead!" he decided. The boatswain ordered the deck to be cleared of spectators, and the crowd made a general movement ashore while the last moorings were cast off.

Amidst the confusion a dog's bark was plainly heard, and suddenly the animal broke through the crowd of visitors, jumped on to the poop and, as a thousand spectators can testify, carried a letter between his teeth.

"A letter!" cried Shandon. "Then *he* must be on board."

"He was, that's a fact, but he isn't now," said Johnson, pointing to the deck, now denuded of the crowd of sightseers.

"Captain! Come here, Captain!" cried the doctor, as he tried to take the letter. But the dog tore himself out of his grasp; he seemed willing to give the letter only to Shandon.

"Here, Captain!" cried the latter.

The dog went across to him and dropped the letter at his feet; then he broke the deep silence by barking loudly three times.

In his astonishment Shandon held the letter without opening it.

"But read it, read it, I say," exclaimed the doctor.

Shandon looked at it. The envelope had neither postmark nor date; it was simply addressed to:

Richard Shandon,

On board the brig, *Forward*.

He opened the letter and read:

You will make for Cape Farewell. You will reach it by 20th April. If the captain does not appear— traverse Davis Straits and continue up Baffin Bay to Melville Bay.

The Captain of the *Forward*,
K.Z.

CHAPTER V

OUT AT SEA

IN spite of the squalls the wind was favourable, and the *Forward* tore through the waves. About three she met the mail steamer plying between Liverpool and the Isle of Man. The hail her captain gave was the last adieu that her crew were to hear.

At five the pilot relinquished command to Shandon and regained his cutter, which soon disappeared in the south-east. Towards evening the brig doubled the Calf of Man. During the night the sea was very rough, but the *Forward* behaved well; leaving the point of Ayr to the north-east, she steered for the North Channel.

Johnson was right; once out at sea the seafaring instinct of the sailors awoke, and the splendid qualities of their ship made them forget her unusual sailing-orders. Life on board went on as usual.

The doctor drank in the sea air with delight; he strode about vigorously in spite of the squalls, and for a savant had fairly good sea-legs.

"The sea is magnificent," he told Johnson, "I've made its acquaintance rather late, but I mean to make up for lost time."

"You're right, Dr. Clawbonny. I'd give all the continents of the world for a stretch of the ocean. They say that sailors soon get tired of their trade, but I've been forty years at sea and I love it as much as ever."

"It's a real pleasure to feel a good ship under one's feet, and if I'm any judge the *Forward* is behaving well."

"You're quite right, Doctor," agreed Shandon, who had joined the others, "she's a fine ship, and to my mind no vessel meant to sail into the ice-fields has ever been found and better equipped. That reminds me that thirty years ago Captain James Ross, seeking the North-West passage——"

"In the *Victory*," added the doctor, "a brig about the same tonnage as ours, and with a steam engine too."

"What! You know about that?"

"Judge for yourself. Marine engines were then in their infancy, and the *Victory's* kept her back; so Captain, after having tinkered with it, ended by dismantling it and left it behind at his first winter quarters."

"The devil!" said Shandon. "You know all about it, I can see."

"Yes, I've read the travels of the great explorers, and I can remember a little of what I've read. I can tell you, too, that McClintock, on the *Fox*, a screw-brig like our own, went more easily than any of his predecessors."

"That's quite right. He was a good sailor was McClintock; I saw him at work. You can add that, like him, we shall find ourselves in Davis Straits in April, and if we succeed in getting through the ice we may find there we shall make good progress."

"Unless," the doctor pointed out, "like the *Fox* in 1857, we happen to be caught at the outset by the ice in the north of Baffin Bay, and have to winter among the icebergs."

"We'll hope for better luck," answered Johnson. "If a ship like the *Forward* can't take us where we want to go, we'd better give it up for good."

"Besides," said the doctor, "if the captain comes on board he'll know better than we what's to be done. So far we don't know anything—his letter doesn't even say where we're aiming for."

"It's something to know where we're going," Shandon answered. "We can manage without that mysterious man's orders for another month at least. Besides, you know what I think about it."

"A little while ago, I thought you were right that the captain would never make his appearance, and that you'd stay in command of the ship; but since we got that second letter I've changed my mind."

"Why, Doctor?"

"Because the letter tells you what route to follow, but not what our goal is; and we must know where we're going. Now how, I ask you, are you to get a letter now we are out at sea? On the Greenland coast the postal service must leave much to wish for. I have an idea that our gentleman is waiting for us

in some Danish settlement—Hosteinberg or Uppernawik; he must have gone there to lay in a supply of sealskins, and buy his sledges and dog-teams and, in short, get together all we need for an Arctic voyage. I shouldn't be at all surprised to see him come out of his cabin some fine morning and take command of the ship in anything but a supernatural style."

"Maybe," answered Shandon drily; "in the meantime wind's getting up, and I can't risk my top-gallant sails in such weather."

Shandon left the doctor and gave the order to reef the topsails.

"He takes it to heart," the doctor commented to the boatswain.

"Yes, and it's a great pity, for you may be right."

On Saturday evening, the *Forward* doubled the Mull of Galloway, whose lighthouse shone to the north-east; during the night she left the Mull of Kintyre to the north, and Cape Fair, on the Irish coast, to the east. Towards three in the morning, leaving Rathlin Island on her starboard side, she emerged from the North Channel into the sea.

On Sunday, 8th April, after the doctor had given a Bible-reading to the assembled seamen, the wind became a perfect hurricane and tended to throw the brig towards the Irish coast; the heavy waves tossed her about so badly that if the doctor was not seasick it was because he refused to be, for nothing could have been easier. At noon Malin Head disappeared towards the south, it was the last part of Europe they were to get sight of, and more than one of the crew gazed at it longingly, wondering if he would ever see it again.

The storm blew itself out about nine in the evening, the *Forward*, like a good sailor, kept on towards the north-west. That day had shown her capabilities, and as the Liverpool connoisseurs had pointed out, she was, above all, a sailing ship. For the next few days she sped on rapidly; the wind veered south, and the sea had a tremendous swell on; the brig was then under full sail. Some petrels and puffins came sailing over the poop; the doctor skilfully shot one of the latter, and fortunately it fell on to the deck. Simpson the harpooner picked it up and brought it to him.

"Poor food that, Dr. Clawbonny," he said.

"It will make good eating, my friend."

"You don't mean to say you're going to eat that thing?"

"And so are you, old fellow," laughed the doctor.

"Pooh," replied Simpson, "but it's oily and rancid like all the other sea-birds."

"Never mind!" answered the doctor, "I've got my own way of cooking that sort of game, and if you take it for a sea-bird I'll swear never to kill another in my life."

"You're a bit of a cook, then?"

"A savant ought to know how to do a little of everything."

"You'd better take care, Simpson," the boatswain told him, "the doctor's a clever man, and he'll make you take this puffin for a grouse."

And indeed the doctor made good his words; he removed the fat, all of which lies just beneath the skin, but mostly on the thighs; with it went the rancid fishy taste so disagreeable in a sea-bird. Thus prepared, the puffin was declared excellent, and Simpson was the first to acknowledge it.

During the storm Richard Shandon had been able to judge the qualities of his crew; he had watched them all narrowly, and knew just how much he could depend on them.

James Wall was devoted to him, grasping and carrying out his orders at once, though he might lack initiative; he was well suited to be second mate.

Johnson was accustomed to the sea; an old hand in the Arctic, with nothing to learn either in audacity or in sangfroid. The harpooner, Simpson, and the carpenter, Bell, were reliable, slaves to duty and discipline. The ice-master, Foker, was an experienced sailor, and, like Johnson, could render good service.

Of the other sailors Garry and Bolton seemed to be the best; Bolton was cheerful and talkative; Garry was apparently thirty-five, with an energetic face, but rather pale and inclined to be melancholy. Clifton, Gripper, and Pen seemed less keen and resolute and always ready to grumble. Gripper had indeed wanted to break his engagement even before sailing, and only a sort of shame had kept him on board. If things went well, if there were not too many risks to run or too much work to do, these three might be depended upon; but they must be well fed, for their hearts, so to speak, were in their stomachs.

Although they had been warned of this, they disliked having to be teetotallers; they missed their brandy and gin, though this did not make them spare the tea and coffee so freely issued. As to the two engineers, Brunton and Plover, and the stoker, Warren, they had so far sat with their hands in front of them, so Shandon knew nothing about their capabilities.

On 14th April the *Forward* got into the Gulf Stream. They were then in $51^{\circ} 37' N.$ by $22^{\circ} 58' W.$, two hundred miles from the tip of Greenland. The weather grew colder, and the thermometer fell to freezing-point.

Though the doctor had not yet begun to wear the garments he was keeping for the Arctic Seas, he was dressed like a seaman; he was a sight to see with his top-boots, in which his legs disappeared completely, his vast sou'wester, his oilskin jacket and trousers; when drenched with heavy rains or enormous waves he looked like some kind of sea-beast, and he was proud of it.

For two days the sea was extremely rough; the wind veered round to the north-west, and delayed the brig's progress. From 14th to 16th April, the swell was great, but on the Monday there came such a torrent of rain that the sea at once grew calm. Shandon discussed this with the doctor.

"It confirms the observations made by the whaler Scoresby, who laid them before the Royal Society of Edinburgh, of which I have the honour to be a corresponding member. You see, when it rains the waves do not rise very high, even with a violent wind, but when the weather is dry the sea is rougher, even with less wind."

"But how do they explain that, Doctor?"

"Quite simply; they can't explain it at all!"

Just then the ice-master, who was keeping watch up aloft, spotted something floating to starboard, about fifteen miles distance down-wind.

"An iceberg here!" exclaimed the doctor.

Shandon raised his telescope, and confirmed its existence.

"That's strange!" mused the doctor.

"Well, at last we've found something to surprise you," laughed the mate.

"I'm not astonished," smiled the doctor, "for the brig *Ann of Poole*, from Greenspond, was caught in 1813 in a regular

ice-field, at forty-four degrees north, and her captain, Dayer-nent, counted flocs by hundreds."

"I see you can teach us something, even about that."

"Very little," answered Clawbonny modestly; "except that ice has been met with even in lower latitudes."

"I knew that already, Doctor, for when I was cabin-boy on the *Fly*—a sloop-of-war——"

"In 1818," continued the doctor, "at the end of March, almost in April, you passed between two large masses of floating ice below the forty-second degree."

"Well, you're too much for me!" cried Shandon.

"So this iceberg doesn't astonish me, as we're two degrees farther north."

"You're a well of information, and all we've got to do is to let down the bucket."

"I shall run dry sooner than you think; and now, Shandon, if we could get a nearer look at that berg, I should be the happiest of doctors."

"No doubt. Johnson," Shandon shouted to the boatswain. "The wind seems to be getting up."

"Yes, Comman'er," answered Johnson; "we're making very little way, we'll soon be feeling the currents in Davis Strait."

"You're right, Johnson, and if we want to sight Cape Farewell on 20th April, we must get steam up or we shall be thrown on the Labrador coasts. Mr. Wall, will you give orders to light the furnace?"

The order was obeyed, and an hour later steam was raised; the sails were furled, and the screw, thrashing into the waves with its blades, drove the *Forward* into the north-west wind.

CHAPTER VI

THE GREAT POLAR CURRENT

SOON the flocks of birds became more and more numerous. Petrels, puffins, guillemots, inhabitants of those desolate shores, announced the approach of Greenland. The *Forward* was rapidly cruising northwards, leaving a long trail of black smoke.

On Tuesday, 17th April, about eleven in the morning, the ice-master first sighted the ice-blink; it was about twenty miles N.N.W. This dazzling strip of whiteness, in spite of the thick clouds, lit up all that part of the sky. Experienced seamen could not be mistaken and inferred from its whiteness that the blink indicated the presence of a large icefield, about thirty miles below the horizon.

Towards evening the wind veered to the south, and became favourable; Shandon put on all sail, and for economy's sake had the fires drawn. The *Forward*, under her topsails and foresails, made for Cape Farewell.

At three on the 18th, they sighted the ice-stream, a white streak, narrow but of dazzling brilliance, between sea and sky. It was obviously drifting from the eastern coast of Greenland rather than from Davis Strait, for the ice usually keeps to the west coast of Baffin Bay. An hour later the *Forward* encountered isolated fragments of the stream; even where most thickly frozen together, they conformed to the movements of the swell.

Next day the lookout sighted the *Valkyrien*, a Danish corvette, travelling in the opposite direction and making for the Newfoundland Banks. The current began to make itself felt, and Shandon had to put on sail to breast it.

He, Clawbonny, James Wall, and Johnson assembled on the poop trying to estimate its direction and strength, and the doctor wanted to know if the current was also found in Baffin Bay.

"There's no doubt about that," answered Shandon, "and sailing vessels find it troublesome to stem it."

"Besides," added Wall, "you also meet it off the east coast of America, as well as off the west coast of Greenland."

"There," said the doctor, "that's a strong argument in favour of the North-West Passage! The current runs about five miles an hour, and it's a little difficult to suppose that it rises from the depths of a gulf."

"What's more likely, Doctor," replied Shandon, "is that though this current runs from north to south, there's a counter-current in Behring Straits running from south to north, which must be the origin of this one."

"Then," commented the doctor, "we must infer that America is completely separated from the Polar lands, and that the waters of the Pacific round its coasts into the Atlantic. Besides, in the Pacific the water is at a higher level, and that's another reason for it to flow into the European seas."

"But," replied Shandon, "there must be some facts to support that theory, and if there are any," he added ironically "our encyclopedic doctor ought to know them."

"Well," replied the person thus described, with amiable satisfaction, "if it interests you, I can tell you that whales, wounded in Davis Straits, have been taken sometime later off Tartary with the European harpoons still in their flanks.

"And unless they could double Cape Horn or the Cape of Good Hope," replied Shandon, "they must certainly have rounded the north coasts of America—that's what I call a fact, Doctor."

"But if that doesn't convince you, my dear Shandon," smiled the doctor, "I could adduce other facts, such as the drift-wood which fills Davis Straits, larch, aspen, and other tropical trees. Now we know that the Gulf Stream keeps them from entering the Straits. So as they come out of it they can only have got into it from Behring Straits."

"That settles it, Doctor."

"Look there!" exclaimed Johnson, "there's something coming along just in time to settle our argument. I can see a fair-sized lump of wood floating out there; if the commander agrees, we'll haul it in, and ask it where it came from."

"That's it," agreed the doctor, "the example after the rule."

Shandon gave the necessary orders; the brig made for the piece of wood, and soon afterwards, though not without some

trouble, the crew hoisted it on deck. It was the trunk of a mahogany-tree, worm-eaten right into its centre; but for this it could not have floated.

"That's fine!" exclaimed the doctor enthusiastically, "for as the Atlantic currents couldn't have washed it into Davis Strait, and as the rivers of North America couldn't have taken it into the Arctic Ocean, it's clear that it must have come here direct from the Behring Straits; and look—you see those sea worms which have eaten into it, they belong to a hot-country species."

"Then it's clear," replied Wall, "that people who doubt the existence of the famous passage are quite wrong."

"Why, this alone ought to convince them," said the doctor; "now I'll just map out the route of that mahogany; it was floated towards the Pacific down some river in the Isthmus of Panama or Guatemala. Then the current swept it along the American coast to Behring Straits, and willy-nilly into the Polar Seas. It's neither so old nor so water-logged that we need hesitate to say that it set out recently, and it was lucky enough to clear the obstacles in that long series of straits which lead into Baffin Bay. Then it was seized by the northern current and swept down Davis Straits to be captured by the *Forward*, to the great joy of Dr. Clawbonny, who asks the commander's permission to keep a specimen of it."

"You can," said Shandon, "but let me tell you that you won't be the only one to own such salvage. The Danish governor of the Isle of Disko——"

"On the Greenland coast," continued the doctor, "boasts a mahogany table made from a tree-trunk fished up under the same circumstances. I know it, but I don't envy him his table for if it wasn't too much trouble, I'd have enough wood there to furnish a whole bedroom."

During the night, from Wednesday to Thursday, the wind blew with extreme violence, and drift-wood was seen in greater quantity; to approach the coast at a season when icebergs were so numerous involved great risk; the mate shortened sail, and the *Forward* cruised on under her foresail and skysail.

The thermometer sank below freezing-point, and Shandon issued suitable clothing, a woollen jacket and trousers, a

flannel shirt, wadmel stockings, like those which Norwegian country people wear, with a pair of waterproof sea-boots. As for Captain, he contented himself with his natural fur, and appeared little sensitive to the change in the temperature; no doubt, he had already experienced more than one trial of this kind: certainly a Dane should not find this difficult. He was seen very little, as he kept himself concealed in the vessel's darkest recesses.

Towards evening the coast of Greenland peeped out through an opening in the fog. The doctor, armed with his field-glasses, could for a moment distinguish a line of peaks, traversed by glaciers; but the fog closed rapidly down on this vision, like the curtain falling at the most interesting moment of a play.

On the morning of 20th April, the *Forward* sighted an iceberg 150 feet high, stranded there from time immemorial; the thaws had not affected it, but had respected its strange form. Many earlier explorers had described it. Naturally the doctor wished to keep a memento of this famous ice-mountain, and he made a passing sketch of it. It is not surprising that such masses should be stranded and stay aground; for to each foot above water they have several below, so that this one was about eighty fathoms deep.

At last, with a noon temperature of only 12°, under a snowy foggy sky, Cape Farewell came into sight. The *Forward* had arrived on the assigned date, so that if it suited the unknown captain to come in such diabolical weather he would have nothing to complain about.

"There you are, then," the doctor meditated, "cape so famous and so aptly named! Many who cleared it like us, were destined never to see it again. Is it, then, an eternal good-bye to all one's friends? You have all passed it, from Frobisher to Franklin, never to return to your hearth and home. For you it was indeed Cape Farewell!"

It was about A.D. 970 that seamen, setting out from Iceland, had discovered Greenland. Since then many other explorers had visited it, and among these was Sir John Franklin, who in search of the North-West Passage, left England in 1845 in command of the *Erebus* and *Terror*: he entered Baffin Bay, but after he passed Disko Island nothing more was heard of him.

His disappearance gave rise to further voyages of exploration, and these at last led to the discovery of the Passage, and to the survey of these Polar continents with their complicated coast lines. The most daring British, French, and American seamen braved their terrors; and, thanks to their work, the maps of that region, so difficult to chart, figure in the archives of the Royal Geographical Society. The strange history of this part of the world passed through the doctor's mind, as he leaned on the rail, and followed with his eyes the long wake left by the brig. Thoughts of its daring navigators crowded into his memory, and he fancied he could perceive, below the frozen crests of the icebergs, the pale ghosts of those who would return no more.

CHAPTER VII

DAVIS STRAIT

ALL that day the *Forward* cut her way easily through the half-broken ice; the wind was good, but the temperature very low; blowing across the ice-fields, the gales brought their penetrating cold.

The night demanded the closest attention; the floating icebergs closed together in that narrow channel; a hundred or so might often be seen at once; under the teeth of the grinding waves and the warmth of the spring they broke loose from the towering coasts to drift away and melt. Masses of driftwood collision with which had to be avoided, kept the crew on the alert; the crow's nest was hoisted up to the masthead—it consisted of a cask, in which the ice-master was somewhat sheltered from the cold winds while he kept watch over the sea and the icebergs, and from which he shouted warnings of danger and sometimes gave instructions to the crew.

The nights were short: since 31st January, the refraction had brought the sun above the horizon, and it seemed to get higher and higher.

But the snow impeded the view, and though it did not cause complete obscurity it rendered navigation laborious.

On 21st April, Cape Desolation appeared in a thick mist. The crew were tired out with the constant strain: since they had entered the ice they had not had a minute's rest, and soon steam had to be raised to cut a way through the heaped-up blocks.

The doctor and Johnson were talking together in the stern, whilst Shandon was snatching a few hours' sleep in his cabin. Clawbonny liked talking to the old sailor, whose numerous voyages had been an education in themselves. He felt a deep friendship for the boatswain, who repaid it with interest.

"You see, Dr. Clawbonny," Johnson explained, "this country isn't like any of the others; they call it Greenland, but there are very few weeks in the year when it deserves its name."

"But who knows if in the tenth century it didn't deserve it?" asked the doctor. "More than one such change has occurred, and I daresay I should astonish you if I were to tell you that according to the Icelandic chronicles two hundred villages used to flourish here about eight or nine centuries ago."

"You'd astonish me so much, Dr. Clawbonny, that I'd find it hard to believe, for it's a miserable country."

"However miserable it may be, it still offers enough shelter to its inhabitants, and even to civilized Europeans."

"Very likely! We met men at Disko and Uppernawik who consented to live in such a climate; but my idea is that they did so by compulsion and not by choice."

"I daresay you're right, though people can get used to anything, and the Greenlanders don't seem to have as much to complain of as the workmen of our large towns; they may be badly off, but they certainly aren't unhappy. I say unhappy, though that's hardly the word for it; for if these people haven't got the comforts of more temperate countries, they are used to a harsh climate, and they find pleasures in it which we can't even imagine."

"I suppose we must think so, as Heaven is just. But many voyages have brought me to these coasts, and my heart always shrinks at the sight of these wretched solitudes; but they ought to have given these capes and promontories and bays more cheerful names, for Cape Farewell and Cape Desolation aren't likely to attract travellers!"

"I've noticed that too," replied the doctor, "but these names have a geographical interest that we mustn't forget. They describe the experiences of the men who named them; and if, along with the names of the explorers themselves, I meet with Cape Desolation I soon find Mercy Bay; Cape Providence is a companion to Port Anxiety; Repulse Bay brings me back to Cape Eden, and leaving Turnagain Point I seek shelter in Refuge Bay. There, under my eyes passes an endless succession of perils, misfortunes, obstacles, successes, despairs, and rescues, mingled with the famous names of my country and, like a series of ancient medals, the words recall the whole history of these waters."

"You're quite right, Dr. Clawbonny, and I hope that

during our voyage we shall meet with more Success Bays than Despair Capes."

"I hope so too, Johnson; but, tell me, have the crew got over any of their fears?"

"Yes, a little; but since we got into the 'trait they began worrying about our strange captain; more than one of them expected to see him when we touched Greenland, and so far there's been nothing; but between you and me, Doctor, doesn't it surprise you too?"

"It does indeed, Johnson."

"Do you believe the captain really exists?"

"Of course I do."

"But why ever does he behave like this?"

"If I really must tell you what's in my mind, Johnson, it's that the captain wanted to entice the crew too far to dream of turning back. Now if he had been on board when we started they would all have wanted to know where we're bound for, and he might have found that troublesome."

"But why?"

"Suppose he means to attempt some superhuman enterprise, and to go where nobody else has ever gone before, do you think he'd ever have got a crew together? But once we've got so far there's nothing for it but to go on."

"Very likely, Dr. Clawbonny. I've known more than one daring adventurer whose very name was a terror, and who would never have found anyone to go with him in his perilous expeditions——"

"Except me," ventured the doctor.

"And me, after you," answered Johnson, "and to follow you; and I'll go so far as to say that our captain is one of them. No matter, we shall soon see; I suppose our unknown captain will take his place on board from the coast of Uppernawik or Melville Bay, and at last he'll tell us where it's his good pleasure to take the ship."

"I quite agree, Johnson, but the difficulty will be to get as far as Melville Bay. Look at those icebergs around us on every side! They scarcely leave us room to move. Just look at that great level stretch."

"We whalers call that an ice-field, a continuous surface of ice which stretches as far as you can see."

"And on that side, that broken ice-field, those long fragments of ice more or less joined at their edges?"

"That's a pack; if it were circular we'd call it a patch; and, if it were longer, a stream."

"And there, those floating lumps of ice?"

"Those are drift-ice; if they were a bit higher they'd be icebergs or hills; it's dangerous to touch them, and we have to steer clear of them. Here, look over there: on that ice-field there is a mound thrust up by the pressure of the ice; we call it a hummock; if it were submerged to its base we'd call it a calf. We have to give them all these names, so that we can recognize them."¹

"It's certainly a marvellous sight!" exclaimed the doctor, as he looked at these wonders; "there's scope for imagination there!"

"Yes," answered Johnson, "ice often takes these queer shapes, and our men aren't slow to find names for them."

"Look, Johnson, look at that group of icebergs! Doesn't it look like a foreign town, an Eastern town, with its minarets and mosques under the pale glare of the moon? Farther on there's a long series of Gothic vaults—they remind me of Henry the Seventh's Chapel or the Houses of Parliament."

"Those houses and towns would be very dangerous to live in, and we mustn't sail too close to them. Some of those minarets are tottering on their base, and the very least of them would crush a vessel like the *Forward*."

"And yet sailors dared to venture into these seas without steam to help them! However could a sailing vessel be steered through these moving reefs?"

"All the same, it's been done, Dr. Clawbonny. When the wind turned against us—and that's happened to me more than once—we patiently anchored ourselves to one of those blocks, and we drifted more or less with it and waited for a favourable chance to set sail again. I must say, though, that this sort of travel took months, while with a little good luck we'll only take a few days."

"It seems to me," said the doctor, "that the temperature is tending to get lower."

¹ And, he might have added, an open channel through the ice is called a lead.—*I.O.E.*

"That would be a pity," answered Johnson, "for we need a thaw to break up these masses and drive them out into the Atlantic; besides, there's more of them in Davis Straits, for the sea gets narrower between Capes Walsingham and Holsteinborg; but beyond the sixty-seventh degree we'll find the seas more navigable in May and June."

"Yes; but first we have to get there."

"Yes, we have to get there, Dr. Clawbonny. In June or July we should have found an open channel, as the whalers do, but our orders were definite we had to be here in April. Unless I'm much mistaken our captain is one of those fellows with only one idea in his head; we set off so early simply because he wants to go a long way. But we shall see."

The doctor was right in stating that the temperature was falling: at noon the thermometer indicated only 6°, and a north-west breeze was getting up—though this cleared the sky, it helped the current to drive the floating ice blocks into the *Forward's* path. They were not all driven by the same forces, and it was not uncommon to meet some of the tallest, gripped at the base by an undercurrent, drifting against the wind.

It is easy to realize the difficulties of such navigation; the engineers had hardly a minute's rest; the engines were controlled as ordered by the officers of the watch. Sometimes the brig had to dash through an opening in the ice-fields, sometimes to race with an iceberg which threatened to close the only practicable outlet; or, again, one of the icebergs, unexpectedly toppling over, might force her to back quickly to keep from being crushed. The ice, carried along, broken up and pressed together by the northern current, was crowded into the channel, and if cemented by the frost it would form an impassable barrier to the *Forward*.

Innumerable birds were encountered; fluttering about with deafening cries, they stretched out their wings and braved in their play the snow whipped by the hurricane. Their ceaseless movement livened up the scene.

Fragments of drifting wood were noisily clashing together; a few enormous, bloated-headed cachalots approached the vessel, though, to the annoyance of Simpson the harpooner, there was no chance of hunting them. Towards evening

several seals appeared, swimming between the ice-blocks, with their noses out of the water.

On the 22nd, the temperature again fell; the *Forward* put on all steam to take advantage of the favourable leads; the wind blew steadily from the north-west: all sails were furled.

During that day, a Sunday, the sailors had little to do. After the reading of Divine service, which was conducted by Shandon, the crew hunted the guillemots, and caught a number of them. These served *à la claubonnienne* lent a pleasant variety to the meals of the officers and crew.

At three in the afternoon the *Forward* sighted the Kin of Sael and the Sugarloaf; the sea was very rough; from time to time a vast and unwelcome fog fell from the grey sky; however, at noon bearings could be taken. The vessel was in $62^{\circ} 20' N.$ by $54^{\circ} 22' W.$ She would have to go two degrees farther to find better sailing in a more open sea.

The next three days saw a continual struggle with the ice; working the engines became very fatiguing; the steam had to be turned on or off quickly and escaped whistling from its valves. In the dense mist the approach of icebergs was only known by the dull thundering of the avalanches; the brig had to sheer off at once lest she be crushed against the heaps of rock-hard fresh-water ice. Shandon never missed the opportunity of renewing his supply of water by embarking several tons of the ice every day.

The doctor could not get used to the optical delusions that were produced on these coasts by refraction. An iceberg might seem to be within easy reach, when it was at least ten or twelve miles away. He tried to accustom his eyesight to these strange conditions, so as to be able to correct its errors.

At last the crew were completely worn out by their efforts to haul the vessel along the ice and to keep it clear of the most menacing icebergs by means of long poles. Nevertheless, on Friday, 27th April, the *Forward* was still held relentlessly back outside the Arctic Circle.

CHAPTER VIII

GOSSIP OF THE CREW

HOWEVER, the *Forward* managed, by adroitly slipping through the leads, to gain a few more minutes north; but instead of evading the enemy, she had soon to attack it. The ice-fields, several miles across, were closing in, and as these moving masses can exert a pressure of more than 10,000,000 tons, they had to be given a wide berth. The ice-saws were got ready, to be brought into action at a moment's notice. Some of the crew philosophically accepted their hard work, but the others grumbled, though they dare not disobey. While they were getting the tools ready, they exchanged opinions.

"Devil take it!" Bolton exclaimed cheerfully, "I don't know what makes me think of a very jolly little tavern in Water Street where a man can make himself comfortable between a glass of gin and a bottle of porter. Can't you imagine it, Gripper?"

"To tell you the truth," came a swift retort, for the man he spoke to had a vile temper, "I can't imagine it here."

"It's only in a manner of speaking, Gripper; it's clear that the snow cities Dr. Clawbonny admires so much can't boast of the smallest pub where a poor sailor can whet his whistle with a glass or two of brandy."

"That's true enough, Bolton; and you may as well add that there's nothing worth drinking here. That's a nice thing—to do men out of their grog when they're in the Northern Seas."

"But," put in Garry, "have you forgotten what the doctor told us? It's to keep us from getting the scurvy. It's the only way to get any farther."

"But I don't want to get any farther, Garry; we've done pretty well to have come as far as this without trying to go where the devil must have made up his mind not to let us."

"Well, we shan't go, that's all," replied Pen. "I declare I've almost forgotten what gin tastes like."

"But remember what the doctor says," replied Bolton.

"It's all very fine for them to talk," said Pen in his coarse

voice. "Who knows if it isn't just an excuse for being stingy with the booze?"

"Pen may be right," said Gripper.

"His nose is too red for that," answered Bolton. "Pen needn't grumble if it loses a little of its colour."

"What's my nose got to do with you?" the sailor replied sharply, attacked in his most vulnerable spot. "My nose doesn't need any of your help, thank you—you look after your own."

"Now then, don't get angry, Pen; I didn't know your nose was so touchy. I like a glass of whisky as well as anybody, especially in a temperature like this, but if I know it'll do me more harm than good, I go without!"

"You may go without," chipped in Warren the stoker; "but everyone doesn't."

"What do you mean, Warren?" asked Garry, staring at him.

"I mean that for some reason or other there are spirits on board, and I fancy they don't go without in the officer's quarters."

"And how do you know that?" asked Garry.

Warren did not know what to say. he was talking just for the sake of talking.

"You see Warren don't know anything about it, Garry," said Bolton.

"Well," said Pen, "we'll ask the commander to issue the grog we've earned, and we'll see what he says."

"I shouldn't if I were you," answered Garry.

"Why?" cried Pen and Gripper.

"Because he'll refuse. You knew what the rules were when you signed on; you ought to have thought about it then."

"Besides," replied Bolton, taking Garry's part because he liked the man's character, "Richard Shandon isn't boss here, he does as he's told, like the rest of us."

"Who is the boss here, then?" Pen wanted to know.

"The captain."

"Always that cursed captain!" exclaimed Pen. "Don't you see that on these ice-banks there's no more a captain than there is a pub? It's a polite way of refusing us what we've got a right to."

"But if there is a captain," replied Bolton, "and I'll bet two month's pay we'll see him before long."

"Done!" replied Pen. "And I've got a thing or two to tell him to his face!"

"Who's talking about the captain?" asked Clifton, who was both superstitious and envious. "Is there anything fresh about the captain?"

"No," they answered at once.

"Well, I believe we'll find him one fine day settled in his cabin, with nobody knowing how he got there or which way he came."

"Get out!" replied Bolton. "Why, Clifton, you seem to think he's a bogey—one of those brownies the Highlanders talk about."

"Laugh as much as you like, Bolton, you won't make me change my mind. Every day when I pass his cabin I look through the keyhole. One of these fine mornings I'll come and tell you what he's like and what he's made of."

"Devil take it, he'll be like everyone else," said Pen, "and if he thinks he can do what he likes with us, he'll soon find himself mistaken, that's all!"

"Pen doesn't know him yet," Bolton pointed out, "and he wants to pick a quarrel with him already."

"Who doesn't know him?" Clifton looked cunning. "I'd like to know who doesn't know him!"

"What the devil do you mean?" asked Gripper.

"I know very well what I mean."

"Well, we don't."

"Well, Pen has had a row with him already."

"With the captain?"

"Yes, the dog-captain—it comes to the same thing!"

The sailors looked at one another, afraid of saying too much.

"Man or dog," Pen muttered between his teeth, "I'll settle with that animal one of these days."

"Come, Clifton," asked Bolton seriously. "Don't you know Johnson was only fooling? You don't mean to say that you believe the dog really is the captain?"

"Indeed I do," answered Clifton in tones of conviction. "If you kept a look-out as I do, you'd have noticed his queer goings-on."

"Well, tell us about it."

"Haven't you noticed the way he paces up and down the poop with such an air of authority, looking up at the sails as though he were on watch?"

"That's true enough," added Gripper, "and one evening I actually found him with his paws on the steering-wheel."

"You don't mean it!" said Bolton.

"And doesn't he go off every night for a stroll on the ice, without worrying about the bears or the cold?"

"That's true enough," agreed Bolton.

"Do you ever see that there animal, like an honest dog, wanting human company, sneaking about the galley or fixing his eyes on Mr. Strong when he's taking something tasty to the chief? Don't you hear him in the night when he's gone two or three miles from the vessel, howling fit to make your blood run cold, as if that weren't easy enough in a temperature like this? What's more, have you ever seen him eat? He never takes nothing from nobody. He leaves his plate untouched, and unless somebody feeds him on the quiet I tell you he lives without eating. If that isn't queer, I'm a fool!"

"'Pon my word," replied Bell, the carpenter, who had listened to Clifton's arguments, "I shouldn't be surprised if you were right."

The other kept silent.

"Well, at any rate, where's the *Forward* taking us?"

"I don't know anything about that," replied Bell. "Richard Shandon will get the rest of his orders at the proper time."

"But who from?"

"Who from?"

"Yes, how?" Bolton urged him.

"Now then, answer up, Bell!" chimed in the other sailors.

"By whom? How? Why, I don't know," said the carpenter, getting embarrassed.

"Why, from the dog-captain," exclaimed Clifton. "He's written one letter already, so he can very well write another! If I only knew half of what that 'ere animal knows, I shouldn't mind being First Lord of the Admiralty!"

"So then you stick to it that that dog's the real captain?"

"Yes, just as I told you."

"Well," said Pen hoarsely, "if that there animal don't want

to end up in a dog's skin, he'd better hurry up and turn into a man, or take my word for it I'll settle his hash."

"What for?" asked Garry.

"Because I want to," replied Pen brutally; "and it's nobody else's business."

"Enough talking, my boys," shouted Johnson, interfering just in time, for the conversation was getting heated. "Get on with your work, and fix up your saws quicker than that. We've got to clear the ice-field."

"What! on a Friday?" muttered Clifton, shrugging his shoulders. "You'll see she won't cross the Arctic Circle as easily as that."

Whatever the reason, all that day the efforts of the crew were almost fruitless. The *Forward* could not cleave the ice-fields even by driving against them at full speed, and they had to anchor for the night.

On Saturday, the temperature again fell under the east wind. The weather cleared, and the eye could sweep over the distant white plains, rendered dazzling by the reflection of the sun's rays. At seven in the morning the thermometer marked 8° below zero.

The doctor was tempted to stay quietly in his cabin, and re-read the Arctic voyages; but, as was his custom, he asked himself what would be the most disagreeable thing he could do, and decided that to go on deck and help the men would not be very pleasant in such a temperature. Faithful to his rule, he left his well-warmed cabin and went to help haul the vessel. He appeared to great advantage in the green spectacles which protected his eyes from the glare of the reflected sunshine; he was always careful to wear them to avoid ophthalmia, so prevalent in these high latitudes.

Towards evening the *Forward* had made several miles farther north, thanks to the men's hard work and to Shandon's skill in taking advantage of every favourable opportunity; by midnight she had cleared the sixty-sixth parallel, and the lead-line indicated twenty-three fathoms; Shandon realized he was on a shoal, and that land was only thirty miles to the east.

But now the masses of ice, so far motionless, split and began to move; icebergs appeared to be surging up in every direction; the brig was entangled in a series of moving floes, whose

crushing force would be irresistible. Handling her became so difficult that Garry, the best helmsman, took the wheel; the ice-mountains threatened to close up behind the brig; she had to find a way through the floating ice, and prudence as well as duty enjoined them to go ahead. The difficulties increased when Shandon found it impossible to fix his direction among these ever-changing masses.

The crew was divided into two groups, larboard and starboard; each man, armed with a long iron-tipped pole, thrust back the menacing ice-blocks. Soon the *Forward* entered a lead between two towering blocks, so narrow that the tips of her yards brushed against the rock-hard walls. She gradually got involved in a winding gully, filled with eddies of snow, while around her floating ice crashed and split with sinister crackings.

It soon became clear that there was no escape from this gully. An enormous block, trapped in the channel, was driving rapidly on to the *Forward*: it seemed impossible to avoid it, and just as impossible to back out along a road already choked.

Shandon and Johnson, standing on the prow, were studying the position. Shandon pointed with his right hand in the direction the helmsman was to take, while his left indicated to James Wall, posted beside the engineer, his orders for the engines.

"How will this end?" the doctor asked Johnson.

"As God wills," replied the boatswain.

The ice-block, at least a hundred feet high, was only about a cable's length from the *Forward*, and was threatening to crush her to pieces.

"Curse the luck!" exclaimed Pen, with a frightful oath.

"Silence!" exclaimed a voice which nobody could recognize in the midst of the storm.

The block seemed to be falling headlong upon the brig; there was a moment of unspeakable anxiety; in spite of Shandon's orders, the men flung down their poles and flocked to the stern.

Suddenly a frightful sound was heard; a veritable water-spout fell upon the deck, thrown up by an enormous wave. A cry of terror rang out from the crew, though Garry, at the

helm, held the *Forward* on her course in spite of her frightful lurches.

When again they looked at the ice-mountain it had vanished; the channel was clear, and beyond it a long lead, lit by the sunshine, allowed the brig to continue on her way.

"Well, Dr. Clawbonny," said Johnson, "how can you explain that?"

"It's quite simple," answered the doctor, "it often happens. When these floating masses split away during the thaw, they drift off separately, in perfect equilibrium. But by degrees, as they move southwards into warmer water, their base, weakened by collision with other icebergs, begins to melt and get smaller. At last comes the moment when the centre of gravity is displaced, and then of course they overturn. But if that one had overturned two minutes later, it would have fallen on our vessel and crushed her to pieces."

CHAPTER IX

ANOTHER LETTER

THE Arctic Circle was cleared at last. On 30th April, at midday, the *Forward* passed Holsteinborg; picturesque mountains towered up on the eastern horizon. The sea appeared almost clear of ice, and the few remaining floes could easily be avoided. The wind veered round to the south-east and the brig, under full sail, pushed on up Baffin Bay.

The way was unusually calm, and the crew could snatch a little rest. Many birds were swimming and fluttering around the vessel; amongst these were alca-alla, rather like teal, black with a white breast; they swooped into the sea, remaining submerged for as much as forty seconds.

The day would not have been out of the ordinary except that something happened very difficult to explain. At six in the morning Richard Shandon, re-entering his cabin after being relieved, found a letter on his table:

To the Commander,
Richard Shandon,
On the *Forward*
Baffin Bay.

Shandon could not believe his eyes, and before reading so strange an epistle he sent for the doctor, James Wall, and Johnson, and showed it to them.

"Things are getting very queer," commented Johnson.

"It's splendid!" thought the doctor.

"At last," Shandon exulted, "we shall know the secret."

He ripped open the envelope and read:

Commander—The captain of the *Forward* is pleased with the coolness, skill, and courage that your men, your officers, and yourself have recently displayed; he begs you to convey his thanks to the crew.

Kindly steer north towards Melville Bay, and thence try to enter Smith Sound.

The Captain of the *Forward*,
K.Z.

Monday, 30th April, off Cape Walsingham

"And that's all?" cried the doctor.

"That's all," replied Shandon, as the letter fell from his hands.

"Well," said Wall, "this mysterious captain doesn't even suggest coming on board, so I suppose he never will come."

"But how did this letter get here?" asked Johnson.

Shandon was silent.

"Mr. Wall is right," replied the doctor, after picking up the letter and turning it over and over, "the captain won't come on board for an excellent reason——"

"And what's that?" Shandon interrupted him.

"Because he's here already," was the doctor's simple reply.

"Already!" exclaimed Shandon. "What do you mean?"

"Well, how otherwise do you explain how this letter arrived?"

Johnson nodded his head approvingly.

"It isn't possible!" protested Shandon. "I know every man in the crew. We'd have to believe that the captain has been here among us ever since we set sail. It isn't possible, I tell you. There isn't one of them that I haven't seen over a hundred times in Liverpool, Doctor, your idea won't hold water."

"Then what do you think, Shandon?"

"Anything but that! I think that the captain, or one of his men, has taken advantage of the darkness, the fog, or anything you like, to slip on board, we aren't very far from land, there are Esquimaux kayaks that can slip unseen between the icebergs, somebody may have come on board and left the letter, the fog was thick enough to help them."

"And to keep them from seeing the bug," replied the doctor, "if we couldn't see an intruder slip on board, how could he locate the *Forward* in the midst of a fog?"

"That's right enough," exclaimed Johnson.

"So I get back," said the doctor, "to my first idea. What do you think about it, Shandon?"

"Whatever you like," replied Shandon fiercely, "but I won't believe this man is on board my ship."

"Perhaps," added Wall, "someone in the crew has had orders from him."

"Maybe," admitted the doctor.

"But which of them?" asked Shandon. "I tell you I've known all of them a long time."

"Anyhow," replied Johnson, "if this captain shows himself, whether he's man or devil, we'll welcome him; but there's something else we can learn from this letter."

"What's that?" asked Shandon.

"Why, that as we're to steer not only towards Melville Bay, but right into Smith Sound, that makes it clear that our aim isn't to seek the North-West Passage, as we shall leave the only track that leads to it on our left—Lancaster Sound; so we've got to expect tricky navigation in unknown seas."

"Yes, Smith Sound," replied Shandon, "that's the route that the American explorer Kane followed in 1853, and what perils he had to face! For a long time he was given up as lost. However, as we must go, let's go on. But where? How far? To the Pole?"

"And why not?" cried the doctor.

The idea of so insane an attempt made the boatswain shrug his shoulders.

"After all," resumed James Wall, "getting back to the captain, if he exists at all, I can't see anywhere on the coast of Greenland except Disko or Uppernawik where he possibly can be waiting for us; in a few days we'll know what to expect."

"But," the doctor asked Shandon, "aren't you going to tell the crew about this letter?"

"With the commander's permission," replied Johnson, "I shouldn't do anything of the kind."

"But why not?" asked Shandon.

"Because all this mystery is taking the heart out of the men; they're already getting anxious about the fate of our expedition, and if its supernatural side is overstressed it may affect them seriously, and then in a critical moment we

shan't be able to rely on them. What do you say about it, Commander?"

"And you, Doctor—what do you think?" asked Shandon.

"I think Johnson's right."

"And you, Wall?"

"Unless there's any better reason, I should agree with these gentlemen."

Shandon reflected for a few minutes, and re-read the letter carefully.

"Gentlemen," said he, "your views are excellent, but I can't accept them."

"Why not, Shandon?" asked the doctor.

"Because the instructions of this letter are formal: they order me to give the captain's thanks to the crew, and so far I have always blindly obeyed his orders however they reached me. So I cannot——"

"But——" said Johnson, reasonably anxious about the effect of such a communication upon the sailors' minds.

"My dear Johnson," answered Shandon, "your arguments are excellent, but read this —'he begs you to convey his thanks to the crew'."

"Then you must do so," replied Johnson, for he too was a great stickler for discipline. "Shall I muster the crew on deck?"

"If you please," replied Shandon.

The news that a letter had come from the captain spread like wildfire: the sailors were soon assembled, and the mate read out the mysterious letter.

It was received in dead silence; the crew dispersed, a prey to a thousand suppositions. Clifton was giving himself up to all the wanderings of his superstitious imagination; he credited much of the business to the dog-captain, and whenever he happened to meet him he never failed to salute him. "I told you the animal could write," he explained.

No one had anything to say to this, and even Bell, the carpenter, would not have known what to reply.

But they all realized that even if the captain were not there, his spirit or his shadow was watching them, and henceforward the wisest of them kept what they thought about him to themselves.

On 1st May, at noon, they were in 68° N. and $56^{\circ} 32'$ W. The temperature was higher and the thermometer marked 25° above zero.

The doctor amused himself watching the antics of a white bear and two cubs on the edge of an ice-pack. Accompanied by Wall and Simpson, he tried to hunt them in the canoe; but the animal, by no means of a warlike disposition, rapidly led its offspring away, and soon the chase had to be given up.

Another cape was doubled during the night under a favourable wind, and soon the high mountains of Disko rose on the horizon. Godhaven Bay, the residence of the Governor-General of the Danish Settlements, was on the right. Shandon did not consider it worth while to stop, and soon outran the Esquimau kayaks which were trying to reach his ship.

It was from the island of Disko, also called Whale Island, that, on 12th July, 1845, Sir John Franklin wrote to the Admiralty for the last time. It was here too that on 27th August, 1859, Captain McClintock set foot when he returned with only too definite proof of the loss of the Franklin expedition. These memories plunged the doctor into melancholy reflections, but soon the heights of Disko were lost to view.

Many icebergs were on the coasts, some of those which even the strongest thaws cannot detach; the endless series of ridges took the strangest forms.

The next day, towards three, Sanderson Hope was sighted to the north-east and was left on the starboard about fifteen miles away; the mountains seemed tinged reddish-brown. During the evening several finner whales, with fins on their backs, came playing around the ship, spurting out air and water from their blow-holes.

It was during the night of 3rd May that the doctor saw for the first time the sun graze the horizon without actually dipping into it. Since 31st January, the days had been getting longer and longer and now the sun was not setting at all. To those not used to it, this perpetual light was a source of wonder and even of fatigue; it is almost impossible to realize how much our eyes need periods of darkness. The doctor felt real pain from this perpetual glare, made still more acute by the reflection of the sun's rays upon the ice-fields.

On 5th May the *Forward* crossed the seventy-second parallel; two months later she would have encountered numerous whalers, but as yet the straits were not open enough to let them enter Baffin Bay. Next day, after passing Woman's Island, she sighted Uppernawik, the most northerly Danish settlement on these coasts.

CHAPTER X

HAZARDOUS NAVIGATION

SHANDON and Dr. Clawbonny, with three of the crew, went on shore in the whale-boat. The governor, his wife, and his five children, all of the Esquimau race, came politely to meet the visitors. The doctor, who was something of a philologist, knew enough Danish to get on friendly terms with them; moreover, Foker, the expedition's interpreter as well as its ice-master, knew about twenty words of the local language, and if you are not ambitious twenty words will carry you far.

The governor, who had been born on the island, had never left his native country. He did the honours for himself and the Lutheran minister of his town, which consisted of three wooden houses, a school, and some storehouses filled with flotsam and jetsam. The rest of the town consisted of igloos, entered by creeping through a hole.

Most of the population came down to greet the *Forward*, and more than one of them went out into the middle of the bay in his kayak, fifteen feet long and scarcely two feet wide.

The doctor knew that the word *Esquimaux* meant "raw-fish-eaters", and he knew too that the people regarded it as an insult, so he took care to call them "Greenlanders". Yet from the look of their oily sealskin clothing, making it impossible to distinguish their sex, and from their greasy smell, it was easy to guess what food they ate. Like all Ichthyophages, they were badly affected by leprosy, but this seemed to have no other effect upon their general health.

The Lutheran minister and his wife, with whom the doctor had promised himself a private chat, were away visiting Proven on the south of Uppernawik: so Clawbonny was restricted to conversing with the governor. This chief magistrate did not seem to be well educated; a little less and he would have been completely ignorant, a little more and he would have known how to read. The doctor asked him about the trade and the customs and manners of the *Esquimaux*, and

learnt by signs the comparative values in Copenhagen of seal-skins, bear-skins, and blue and white fox-skins.

He also wished to complete his personal education by visiting one of the Esquimau huts; one can hardly imagine what a learned man will do in the quest for knowledge. But the opening of those hovels was too narrow for the enthusiastic fellow to crawl into; this was very lucky for him, for there is nothing more repulsive than that accumulation of things living and dead, seal-meat and Esquimau bodies, rotting fish and dirty wearing apparel, which furnish a Greenland hovel; no window to freshen the unbreathable air, only a hole at the top of the hut, which lets out the smoke but keeps in the smell.

Foker explained this to the doctor, who did not curse his corpulence the less for that. He wanted to investigate conditions for himself.

"I feel sure," said he, "one gets used to it in the long run."

"In the long run," depicts Dr. Clawbonny in a single phrase.

While the worthy doctor was carrying out his ethnographical studies, Shandon, following his instructions, was busy getting means of transport to cross the ice. He had to pay several pounds for a sledge and six dogs, and even then he found it hard to persuade the natives to part with them. He had also wished to engage Hans Christian, the experienced dog-driver, who had taken part in Captain McClintock's expedition; but, unfortunately the man then happened to be in Southern Greenland.

Then came the grand question, was there in Uppernawik a European waiting for the *Forward's* arrival? Did the governor know if any foreigner, an Englishman probably, had arrived recently? How long was it since he had last been in touch with whalers or other vessels? To these questions the governor replied that not one solitary foreigner had landed on that side of the coast for more than ten months. Shandon then asked for the names of the whalers most recently seen; he knew none of them. It was disheartening.

"You must agree, Doctor, that all this is impossible! Nothing at Cape Farewell, nothing at Disko Island, nothing at Uppernawik."

"If in a few days' time you say 'Nothing in Melville Sound', I shall salute you as the one and only captain of the *Forward*."

Towards evening the boat took the visitors back to the ship. Strong, seeking for fresh food, had obtained several dozen eider-duck eggs, twice as big as hens' eggs, and greenish in colour. This was not much, but the change was refreshing to a crew fed on salted meat.

The wind became favourable the next day, but Shandon did not order the vessel to be got under sail; he wanted to stay another day, to give time for any new arrival to join the *Forward*. He even ordered the 16-pounder to be fired at hourly intervals; it thundered out with a terrible din amidst the icebergs, but all it did was to frighten the flocks of sea-birds. During the night he sent up several rockets, but in vain. So he had to make up his mind to set sail.

On 8th May, at six in the morning, the *Forward*, under her topsails, foresails, and topgallant, lost sight of Uppernawik, and the hideous stakes hung with seal-guts and deer-paunches. The wind was blowing from the south-west, and the temperature went up to 32°. The sun pierced the fog, and the ice was loosening under its rays. But the reflection of the light had a disastrous effect on the eyesight of several of the crew, who were struck with snow-blindness, a weakness of the eyes very frequent in spring, which often produces total blindness. The doctor advised the sufferers and their companions to cover their faces with green gauze, and he was the first to act on his own prescription.

The dogs bought by Shandon at Uppernawik were rather savage, but in the end they grew accustomed to the ship; Captain did not take the arrival of these new comrades too much to heart and seemed to know their ways. Clifton was not the last to comment that Captain must already have had something to do with his brethren the Greenlanders. These, when on land had always been famished and weakened by under-nourishment; they now thought only of recruiting their strength on the ship's rations.

On 9th May, the *Forward* arrived within a few cables' length of the most westerly of the Baffin Isles. The doctor noticed several rocks in the bay between the islands and the mainland, the Crimson Cliffs; they were covered over with snow as red

as carmine, to which Dr. Kane assigns a purely vegetable origin. Clawbonny wanted to study them more closely, but the ice kept the vessel from approaching the coast; although the temperature had a tendency to rise, it was easy to see that the icebergs and ice-streams were accumulating towards the north of Baffin Bay.

Beyond Uppernawik, the land looked very different, and immense glaciers were outlined on the horizon against a greyish sky. On the 10th the *Forward* left Hingston Bay on the right, near 74° N. Several hundred miles westward Lancaster Sound opened into the sea.

But then that immense expanse of water disappeared under enormous ice-fields, upon which hummocks rose up as regularly as though they had been crystallized. Shandon had got up steam, and until the 11th the *Forward* wound her way between the floes, leaving a trail of black smoke against the sky.

But now obstacles were soon encountered; the leads were being closed by the incessant movement of the floating masses; every minute the water seemed likely to freeze up before the *Forward's* prow, and if she were nipped it would be difficult to free her. They all knew this and brooded over it.

On board this vessel, steering aimlessly without known destination, recklessly striving to advance northwards, signs of hesitation appeared among the crew, accustomed though they were to danger; many, forgetting the rewards promised them, regretted having ventured so far, and already a certain demoralization prevailed among them; this was increased by Clifton's fears, and by the idle talk of two or three of the disaffected.

To the disquiet of the crew was added overwhelming weariness for, on 12th May, the brig was hemmed in on every side; her steam was powerless, and yet a way had to be cleared through the ice-fields. To use the ice-saws was very difficult among such floes, which measured from six to seven feet thick. When two parallel grooves divided the ice for a hundred feet or so, the men had to break away the intervening material with hatchets or handspikes; then anchors were run out and secured in holes bored with great augers; the capstan was set to work, and so the vessel was hauled along. The great difficulty

was to thrust the fragments of ice under the floes to open up a free channel, and for this they had to use long iron-spiked poles.

At last the hauling; the handling of the saws, the capstan and the poles; the incessant and enforced dangerous work in the midst of fogs or thick snow; the low temperature, ophthalmic troubles and moral disquiet, all contributed to discourage the crew, and to react on their imagination.

When sailors have an energetic, audacious, and convinced leader, who knows what he wants, where he is going, and what end he seeks, confidence sustains them in spite of themselves. They are one with their chief, feeling strong in his strength, and calm in his calmness; but there was a suspicion on the brig that the commander was not sure of himself, that his unknown destination was making him hesitant. In spite of his energetic nature, his weakness betrayed itself in his conflicting orders, his uncompleted manoeuvres, his stormy moods, and a thousand details which could not escape the crew's notice.

Moreover, Shandon was not captain and master under God of the ship. This in itself was reason enough for arguing about his orders; from argument to wilful disobedience the step is easy. The malcontents soon brought to their side the first engineer, who hitherto had been a slave to duty.

On 16th May, six days after the *Forward's* arrival at the ice-bank, Shandon had not gained two miles northwards, and the ice threatened to freeze her in until the following season. The situation was getting dangerous.

Towards eight in the evening he and the doctor, accompanied by Garry, went out to reconnoitre the ice-fields. They took care not to go too far away from the vessel, as it was difficult to fix any landmarks in whose white solitudes, whose appearance was continually changing. The refraction produced strange effects, which astonished the doctor; for when he thought he had to jump only a foot he had to cross five or six, or vice versa; and either way the result was a fall, which if not dangerous was at least painful, on ice frozen hard as glass.

Shandon and his companions were looking for a practicable lead; three miles from the ship they succeeded, not without

some trouble, in climbing an iceberg, which might be 300 feet high.

From this point their view extended over a desolation which looked like the ruins of a gigantic town with its fallen obelisks and its overthrown steeples and palaces jumbled together—a veritable chaos. The sun threw long oblique rays of a light without warmth, as if some heat-absorbing substance had been placed between it and that devastation. As far as eye could reach, the sea looked as if it were frozen.

“How shall we get through?” asked the doctor.

“I haven’t the least idea,” replied Shandon; “but we’ll get through even if we have to use gunpowder to blow up those icebergs, for I certainly won’t let that ice shut me up till next spring.”

“But that was what happened to the *Fox*, not far from here. Never mind,” continued the doctor, “we shall get through with a little philosophy. Believe me, that is worth all the machinery in the world.”

“I must say,” replied Shandon, “that the year hasn’t opened very favourably.”

“That I can’t deny and I notice that Baffin Bay looks like being in the same state as it was before 1817.”

“Then you think, Doctor, that it hasn’t always been like this?”

“No; from time to time there are vast breakings-up which scientists cannot at all explain—up to 1817 this sea was constantly obstructed, then suddenly an immense cataclysm drove the icebergs into the ocean, leaving many of them stranded on Newfoundland Bank. From that time on Baffin Bay has been almost clear of ice, and now it’s visited by a good many whalers.”

“And since then travel in the north has been easier?”

“Incomparably so; but for the last few years a tendency has been noticed for the bay to close up again, and it seems likely to do so for a long time—another reason for us to go on as far as we can. Just now we look like people who get into unknown passages, with all the doors shutting behind them.”

“Do you advise me to back out?” asked Shandon, seeking to read the answer in the doctor’s eyes.

“I! I have never known how to take a step backward, and

even if we should never return, I should still say 'Go ahead'. However, I want to make it clear to you that if we do anything rash, we know well enough what we've got to face."

"Well, Garry, what do you think?" asked Shandon.

"I, Commander, I should go on, I quite agree with Dr Clawbonny but you must do as you think fit give the orders and we'll obey."

"They don't all speak like you, Garry," replied Shandon. "They aren't all in a mood to obey. Suppose they were to refuse to go on."

"Commander," replied Garry coldly. "I have given you my advice because you asked me for it but you don't have to act upon it."

Shandon did not reply after carefully studying the horizon, he climbed with his two companions down on to the ice-field.

CHAPTER XI

THE DEVIL'S THUMB

MEANWHILE, the crew had been getting the ship ready to withstand the pressure of the ice-fields. Not only were the sailors fully occupied with this laborious work, even the stoker and the two engineers had to help therein, for whenever they were not wanted at the engine, they again became seamen and liable to be employed on any of the ship's duties. But all this could not be accomplished without a good deal of grumbling.

"I'll tell you what," said Pen, "I've had enough on it, and if in three days the break-up hasn't come, I'll swear to God that I'll wait for it with my arms folded."

"You'll wait?" replied Gripper, "you'd do better to help us back out. Do you think we want to stay here till next year?"

"'Struth, it would be a dreary winter," said Plover, "the ship's exposed on all sides."

"And who know," added Brunton, "if even next spring we'll find the sea any more open than it is now?"

"We aren't talking about next spring," said Pen, "today's Thursday. If by next Sunday morning the road isn't clear, we'll back out south."

"That's talking sense!" cried Clifton.

"Are you all on?" asked Pen.

"We're on!" answered all his comrades.

"That's right enough," agreed Warren, "for if we have to work like this hauling the ship along by brute force, my advice is to backwater."

"We'll see about that on Sunday," answered Wolsten.

"As soon as I get the order," Brunton told them, "I'll get steam up."

"Or we'll get it up ourselves," added Clifton.

"If any of the officers," Pen declared, "wants to have the pleasure of wintering here, we'll let him. He can build himself a snow-hut like the Eskimaux."

"None of that, Pen," replied Brunton, "we won't leave anybody. You understand that, you others? Besides, I don't

think it would be difficult to persuade the commander; he has his doubts already and if we were to suggest it quietly——”

“I don’t know about that,” said Plover; “Dick Shandon is a hard, headstrong man, and we should have to sound him carefully.”

“When I think,” replied Bolton, with a sigh of longing, “that in a month we might be back in Liverpool, we could soon clear the southern ice-line. Davis Straits will be open early in June, and we’ll only have to let ourselves drift into the Atlantic.”

“Besides,” said the prudent Clifton, “if we take the commander home with us, acting under his responsibility, our pay and bounty money will be safe; but if we return alone, it won’t be so certain.”

“That’s right!” said Plover, “that devil of a Clifton speaks like a book. Let’s try not to have anything to explain to the Admiralty; it’s much safer to leave no one behind us.”

“But if the officers won’t come?” replied Pen, who wished to push his comrades to the bitter end.

To such a question they were puzzled to reply.

“We’ll see about it when the time comes,” replied Bolton; “besides, it would be enough to win Dick Shandon over to our side, and I don’t see any difficulty about that.”

“Anyhow,” said Pen, cursing fearfully, “there’s somebody I’ll leave here if it cost me an arm.”

“Ah! you mean that dog!” exclaimed Plover.

“Yes, that dog; and before long I’ll do for him!”

“The more so,” replied Clifton, returning to his favourite theme, “as that there dog’s at the bottom of the trouble!”

“He’s the one who’s put a curse on us,” declared Plover.

“It’s through him we’re jammed in an iceberg,” responded Gripper.

“It’s through him we’ve got more ice around us than ever was seen at this time of year,” said Wolsten.

“He’s the one who made my eyes bad,” asserted Brunton.

“He’s cut off the gin and brandy!” added Pen.

“He’s at the bottom of everything,” the assembly agreed, getting excited.

“And he’s captain into the bargain!” cried Clifton.

“Well, Captain Bad Luck,” declared Pen, whose unreason-

able fury was getting stronger at every word; "you wanted to come here, and here you'll stay."

"But how are we to nab him?" said Plover.

"We've a good chance now," replied Clifton; "the commander isn't on deck, the lieutenant is asleep in his cabin, and the fog's thick enough to stop Johnson seeing us."

"But where's the dog?" cried Pen.

"He's asleep near the bunkers," replied Clifton, "and if anybody wants——"

"I'll see to him," Pen answered furiously.

"Look out, Pen, he's got teeth that could snap an iron bar in two."

"If he moves, I'll rip his guts out!" cried Pen, grasping his knife. He rushed below, followed by Warren, who wanted to help him. Soon they came back carrying the animal in their arms; he was firmly muzzled, and his paws were bound tightly together. They had taken him by surprise while he was asleep, and the unfortunate beast had no chance of escaping them.

"Three cheers for Pen!" cried Plover.

"What are you going to do with him now you've got him?" asked Clifton.

"What, drown him, and if ever he gets back——" replied Pen, with a fearful smile of satisfaction.

About two hundred steps from the vessel there was a seal-hole, a kind of circular crevasse cut out from beneath by the teeth of that amphibious animal, and enabling it to come up to breathe on to the surface of the ice. (The seal has to be careful to keep it from freezing up, as the shape of its nose does not allow it to rebore the hole from above, so that if it were attacked it could not escape from its enemies.)

Pen and Warren made their way towards this crevasse, and there, in spite of its struggles, they mercilessly threw the dog into the sea. Then they placed an enormous lump of ice over the opening, forbidding all egress and leaving the poor animal immured in a watery prison.

"Pleasant journey, Captain!" cried the brutal sailor, and soon he and Warren were back on deck. Johnson had seen nothing of this; the fog had thickened round the ship, and the snow was beginning to fall violently.

An hour later, Richard Shandon, the doctor, and Garry

got back to the *Forward*. Shandon had noticed a pass towards the north-east which he meant to take advantage of, and he gave the appropriate orders. The crew obeyed with a certain alacrity, but not without hinting that it was impossible to go farther, and that they only meant to give him three more days' obedience.

During part of the night and the next day the working of the saws and the hauling were constantly kept up, the *Forward* gained about two miles farther north. On the 18th she was in sight of land, and five or six cable-lengths from a remarkable peak, called from its strange shape the Devil's Thumb, it was near this that other vessels had been imprisoned by the ice for several weeks.

The weird shape of the Devil's Thumb, the dreary wastes that surrounded it, the vast ring of icebergs—some of them more than three hundred feet high—the cracking of the ice which the echo reproduced so disquietingly, made the position horribly depressing, and Shandon realized the need to get out of it and push farther ahead.

Twenty-four hours later, according to his reckoning, he had been able to leave the fatal coast about two miles behind, but that was not far enough. Then, unnerved by the false situation in which he was placed, he lost courage and initiative: to obey his instructions and push on towards north, he had thrown his ship into an excessively perilous situation. The men were worn out by the incessant hauling: it took more than three hours to excavate a channel twenty feet long, through ice that was usually from four to five feet thick, and then health was threatening to break down. Shandon was astonished by their silence and their unaccustomed obedience, but he feared that this was the calm before the storm.

His painful disappointment, surprise, and despair may well be imagined when he realized that, as a result of an imperceptible movement of the ice-field during the night of the 18th, the *Forward* had lost all the advantage it had cost her so much toil to gain.

On the Saturday morning they were once more opposite the ever-threatening Devil's Thumb, and in an even more critical position. The icebergs were increasing in numbers, they drifted past in the fog like phantoms.

Shandon was by now completely demoralized, for fright had seized upon this dauntless man as well as upon his crew. He had heard the dog's disappearance mentioned, but he dared not punish those responsible; he feared the result might be mutiny.

Throughout the whole day the snow rose in thick swirlings, wrapping the *Forward* in an impenetrable cloak. Sometimes, under the action of the storm, the fog was rent asunder, and it revealed, towering like a spectre, the Devil's Thumb.

The vessel had been anchored to an immense ice-block; there was nothing more to do, nothing to attempt; the gloom became denser, and the man at the helm could not see the look-out in the bow.

Shandon withdrew to his cabin, a prey to unremitting uneasiness; the doctor was putting his notes in order; half of the crew stayed on deck, the rest down below.

Then, just as the storm redoubled its fury, the Devil's Thumb loomed up, out of all proportion through a rift in the fog.

"Good God!" cried Simpson, drawing back with fright.

"What the devil's that?" exclaimed Foker, and shouts rang out on every side.

"Look, it's going to smash us!"

"We're done for!"

"It's all up with us!"

"Commander! Commander!"

Wall fled sternwards, and Shandon, followed by the doctor, rushed on deck. Through a rift in the fog the Devil's Thumb seemed to have suddenly drawn near to the brig, and to have grown into a most fantastic size. Above it rose a second cone, turned upside-down and balanced on its tip; the enormous mass threatened to crush the ship, for it was swaying as though about to fall. It was a most fearful sight; everyone instinctively drew back, and several of the sailors, leaping on to the ice, abandoned ship.

"Still, all of you!" cried the mate sternly. "Every man to his post!"

"Now, now, friends! There's nothing to be frightened of!" explained the doctor. "There's no danger! Look, Commander, look, Mr. Wall; it's only a mirage, nothing else."

"You're quite right, Dr. Clawbonny," answered Johnson; "those fools were frightened by a shadow."

At the doctor's words most of the sailors came back, and their fear changed to amazement at the wonderful sight, which vanished almost at once.

"They call that a mirage?" protested Clifton. "Well, you may take my word, the devil had something to do with it."

"That's a fact!" Gripper replied.

But when the fog cleared away it unexpectedly revealed an unobstructed lead, this seemed to trend away from the coast, and Shandon decided to seize such a favourable opportunity. Men were placed on each side of the channel, hawsers were lowered to them, and they began to tow the vessel towards the north. This work was carried out energetically, though in silence, and Shandon had steam raised to take advantage of this lead so marvellously disclosed.

"This," he told Johnson, "is providential, and if only we can get a few miles ahead, we'll probably get to the end of our troubles.

"Brunton! stoke up the fires, and as soon as there's enough pressure let me know. Meantime, the men will have got their nerve back—that'll be all to the good, they're in a hurry to get away from the Devil's Thumb; we'll take advantage of that!"

Suddenly the *Forward's* progress was checked.

"What's up, Wall?" cried Shandon. "Have the tow-ropes snapped?"

"No, they haven't," answered Wall, staring over the side. "Hallo, here's the men coming back again. They're climbing the ship's side as if they were scared out of their wits!"

"What the devil's up, then?" cried Shandon, rushing forward.

"Get on board—get on board!" cried the terrified sailors.

Shandon looked northwards, and shuddered in spite of himself. A strange animal, of appalling aspect, and with its foaming tongue protruding from its enormous jaws, was leaping about at a cable's length from the ship. It seemed to be more than twenty feet high, its hair bristling; it was pursuing the sailors, while its formidable-looking tail, quite ten feet long, was brushing the snow and throwing it up in

thick clouds. The sight of such a monster was enough to paralyse the bravest.

"It's a bear!"

"It's a dragon!"

"It's the beast out of Revelations!"

Shandon ran to his cabin for a gun he kept loaded. The doctor likewise got a weapon and made ready to open fire upon an animal whose dimensions recalled the antediluvian quadrupeds and which was advancing towards them in gigantic bounds. They fired together, then all at once the sound of their shots disturbed the air and produced an unexpected result. The doctor looked carefully at the "monster" and could not help laughing.

"It's the refraction!" he exclaimed.

"Only the refraction!" repeated Shandon. But a startled exclamation from the crew interrupted them.

"The dog!" exclaimed Clifton.

"The dog-captain!" his comrades repeated.

"Him again!" cried Pen; "it's always that cursed brute."

And indeed it was the dog. Having got free from his shackles, he had got back to the surface through another crevasse. Then the refraction, through an effect common in these latitudes, had made him appear magnified to formidable dimensions, a result which the vibration of the air had destroyed.

None the less a serious effect had been produced upon the minds of the sailors, who were very little disposed to accept a purely natural explanation. The episode of the Devil's Thumb, the reappearance of the dog under such fantastic circumstances, completely shattered their nerve, and murmurs broke out on all sides.

CHAPTER VII

CAPTAIN HAITIRAS

THE *Forward* was steaming rapidly between the ice-floes. Johnson was at the wheel. Shandon, armed with his snow spectacles, was scanning the horizon, but his joy was short-lived, for he soon found the lead ended in a circle of icebergs. But in spite of the difficulty he preferred pressing on to going back.

The dog was running along the ice plain some way behind the ship, but if he lagged too far, a peculiar whistle was heard and he obeyed it at once. The first time it was heard the sailors stared around them, they were alone on deck all together, and no stranger was to be seen and yet the whistle was heard time and again.

Clifton was the first to get scared. "Did you hear that?" he asked. "Just look how that animal answers to that there whistle."

"I can hardly believe my own eyes," answered Gupper.

"It's all over!" cried Pen. "I won't go any farther."

"Pen's right!" replied Baunton. "it's tempting God!"

"Tempting the devil!" replied Clifton. "I'd sooner lose my bounty money than go a step farther."

"We'll never get back!" Bolton exclaimed desparingly.

The crew had arrived at the highest pitch of insubordination.

"Not a step farther!" cried Wolsten. "Are you all of the same mind?"

"Ay! ay!" answered all the sailors.

"Come on, then," said Bolton, "let's go and find the commander, I'll undertake to do the talking."

The sailors, grouped closely together, advanced to yards the poop.

The *Forward* was then making her way into an immense circle of icebergs, about 1800 feet in diameter, and except for one entrance—the one the vessel had used—it was entirely closed up.

Shandon realized that he had imprisoned himself; but what was he to do? How could they retrace their steps? He felt his responsibility deeply; his hand clutched his telescope. The doctor, with folded arms, kept silent; he was gazing at the ice-wall, whose average height was over 300 feet. A cloud of fog hung over the gulf.

It was then that Bolton broke into speech. "Commander!" he said in a trembling voice, "we can't go any farther."

"What did you say?" replied Shandon, his sense that his authority was being challenged making the blood rush to his face.

"Commander," replied Bolton, "we say that we've done enough for that invisible captain, and we've decided we'll go no farther."

"You're decided?" cried Shandon. "Is that what you're telling me, Bolton? You be careful!"

"Your threats don't frighten us," Pen replied brutally, "we won't go an inch farther."

Shandon was advancing towards the mutineers when the mate came up and whispered: "Commander, if you mean to get out of here we haven't a minute to lose, there's an iceberg drifting up the lead, and it looks like blocking it up and shutting us in."

Shandon studied the position hastily.

"You'll account for your conduct later on, you scum," he said. "Meantime, about ship!"

The sailors rushed to their posts, and the *Forward* quickly veered round, the furnaces were heaped up, for it was essential to outrun the floating mass. It was a race between the brig and the iceberg. The former, so as to get through, was rushing southwards, the latter was drifting north, threatening to bar her way.

"More steam! Give her more steam!" cried Shandon. "Do you hear, Brunton?"

The *Forward* glided like a bird amidst the scattered ice-floes, which her prow cut clean through, her hull trembled with the vibration of the screw, and the manometer indicated a high pressure of steam, which whistled out with a deafening roar.

"Screw down the valves!" cried Shandon, and the engineer obeyed at the risk of blowing up the ship.

But his despairing efforts were in vain. The berg, caught by an undercurrent, was rapidly approaching the lead, and the brig was still about three cables' length from it, when the mountain of ice, moving like a corner-stone into the gap, was jammed between its neighbours and closed up the outlet.

"We're lost!" cried Shandon, unable to keep back the imprudent words.

"Lost!" repeated the crew

"Every man for himself!"

"Lower the boats!"

"Down to the stores!" cried Pen and several of his kidney, "and if we have to get drowned, let's drown ourselves in gin!"

Disorder among the men was at its height and they had lost all self-restraint. Shandon felt himself defeated, when he tried to give orders he stammered and hesitated, unable to find any words. The doctor was walking up and down in great distress. Johnson stoically folded his arms and said nothing.

Suddenly a voice was heard, strong, imperious, and energetic

"Every man to his post! 'Bout ship!"

Johnson started, and almost without realizing it he spun the wheel. He was just in time, for the brig was about to crush herself against her prison walls.

But while Johnson was instinctively obeying, the rest of the crew, down to the stoker Warren, who had abandoned his fires, and even to black Strong, who had left his galley, had assembled on deck. They saw emerge from that cabin the only man who had its key, and that man was the sailor Garry.

"Sir!" cried Shandon, turning pale "Garry—you—by what right do you take command here?"

"Duk!" called Garry, and he gave that whistle which had so much surprised the crew. The dog, at the sound of his right name, gave one bound on to the poop and lay quietly down at his master's feet.

The crew did not say a word. The key which the captain of the *Forward* could alone possess, the dog he had sent and now who came thus to confirm his identity, that commanding tone which it was impossible to mistake—all this worked strongly on the minds of the sailors, and sufficed to establish Garry's authority.

Besides, he could hardly be recognized; he had cut off the long whiskers which had covered his face, making it look more energetic and commanding; clad in the uniform of his rank, he appeared in the insignia of ship's master.

All at once, with that sickleness so characteristic of them, the crew burst into a shout: "Three cheers for 'ie captain!"

"Shandon!" ordered the latter, "muster the crew; I want to inspect them!"

Shandon obeyed and gave his orders in changed tones. The captain advanced to meet his officers and men, saying something appropriate to each. When he had finished the inspection he returned to the poop, and addressed them calmly:

"Officers and sailors: I am English, like yourselves, and my motto is that of Nelson, 'England expects that every man will do his duty.'

"As an Englishman I am resolved—we are resolved—that no others shall go where we have never gone. As an Englishman I will not allow—we shall not allow—any other people to have the glory of going further north than ourselves. If ever human foot can tread upon the North Pole, it shall be the foot of an Englishman.

"Here is our country's flag. I have equipped this vessel, I have devoted my fortune to this enterprise, and, if necessary I shall devote to it my life—and yours; for I am determined that these colours shall fly above the North Pole. Take courage. From this day, for every degree we go farther northwards, you shall receive a thousand pounds. As there are ninety degrees all told, and we are now in the seventy-second, you can work it out. Besides, my name is enough. It stands for energy and patriotism. I am Captain Hatteras!"

"Captain Hatteras!" exclaimed Shandon, and that name, well known to English sailors, went from mouth to mouth.

"Now," Hatteras continued, "anchor the brig to the ice, draw the fires, and get back to your duty. Shandon, I want to discuss the position with you; join me in my cabin, with the doctor, Wall, and the boatswain. Johnson, dismiss the men."

Calm and impassive, he quietly left the poop while Shandon saw to the anchoring of the brig.

Who, then, was this Hatteras, and why did his name make so profound an impression upon the crew?

John Hatteras was the only son of a London brewer, who had died in 1852 worth six millions. Still young, he embraced the maritime career in spite of the splendid fortune awaiting him. Not that he felt any vocation for commerce, but the instinct of geographical discovery was in his blood. He had always dreamt of placing his foot where no mortal foot had yet been placed.

At the age of twenty he already possessed a vigorous constitution; an energetic face, lined almost geometrically; a high forehead; attractive but cold eyes, thin lips, which set off a mouth sparing of words, middle height, solidly-jointed limbs, set in motion by muscles of iron, the whole forming a man endowed with a temperament fit for anything. To see him was to realize that he was coldly determined, his was a character that never drew back and he was ready to stake the lives of others as well as his own. It was well to think twice before following him in any expedition.

John Hatteras had all an Englishman's pride. He had once replied to a Frenchman who had said with what he thought was politeness and amiability, "If I were not a Frenchman, I should want to be an Englishman."

"And if I were not an Englishman," answered Hatteras, "I should want to be an Englishman."

That answer revealed the man's character: his dearest wish was that Englishmen should have the monopoly of geographical discoveries, and it distressed him that they had done so little and had, in fact, lagged behind the other nations.

Christopher Columbus, a Genoese, had discovered America; Vasco da Gama, a Portuguese, India; another Portuguese, Fernando de Andrada, China, and a third, Magellan, the Tierra del Fuego. Canada had been discovered by Jacques Cartier, a Frenchman, other lands, from Labrador to Tasmania, had been discovered by Icelanders, Scandinavians, Portuguese, Russians, Danes, Spaniards, Genoese, and Dutch—but not one by an Englishman. Captain Hatteras could not reconcile himself to the exclusion of his countrymen from the glorious roll of the great discoverers of the fifteenth and sixteenth centuries.

He could console himself somewhat when he turned to

more modern times. Englishmen now had the best of it in Australia; in America; in India; and in Africa.

But for a man like Hatteras this was not enough; to his mind, these bold travellers were perfectionists rather than inventors; he was determined to do even better, and he would gladly have invented a country if he could, only to have the honour of discovering it.

He had noticed that, although Englishmen did not form a majority amongst ancient discoverers, yet there existed, nevertheless, a corner of the globe where they seemed to have concentrated all their efforts, the lands and seas of North America. The list of Polar discoveries began with that of Nova Zembla, in 1553, and from then on a host of adventurers had continually explored those unknown lands.

The limits of the northern coasts of America had been mapped, and the North-West Passage almost discovered but this was not enough, there was something yet to be done, and John Hatteras had twice attempted it. Equipping two ships at his own expense, he had sought to reach the North Pole, and thus to crown the series of English discoveries by the greatest of all achievements. This was the aim of his life.

After a few successful cruises in the Southern seas, he had first tried in 1846, to go north through Baffin Bay, but he could not get beyond the 74° N, he then commanded the sloop *Halifax*. His crew had suffered atrocious torments, and he had pushed his adventurous rashness so far that, thereafter, sailors were little tempted to recommence similar expeditions under such a chief.

However, in 1850 Hatteras succeeded in enrolling on the schooner *Farewell* a score of determined men, tempted principally by the rich rewards he offered. It was then that Dr. Clawbonny had written to him, though he did not know him, seeking to join the expedition, — but the post was already filled and that was lucky for the doctor.

The *Farewell*, following the route taken in 1817 by the *Neptune* of Aberdeen, got up north of Spitzbergen as far as 76°. There the expedition was compelled to winter. But the sufferings of the crew had been so great and the cold so intense, that not one of them saw England again, with the exception of Hatteras himself, repatriated by a Danish whaler

after he had walked more than two hundred miles across the ice.

The sensation produced by his lonely return was immense. Who in future would dare to follow Hatteras in his mad projects? Yet, he did not despair of setting out once more: his father, the brewer, died and he now possessed a nabob's fortune.

But then a geographical achievement struck him a heavy blow. A brig, the *Advance*, manned by seventeen men, equipped by a merchant named Grinnel, commanded by Dr. Kane, and sent in search of Sir John Franklin, cruised in 1853 through Baffin Bay and Smith Strait, beyond 82°, much nearer the Pole than any of his predecessors.

This vessel was American, Grinnel was American, and Kane was American! It can easily be understood how the Englishman's disdain for the Yankee changed to hatred in the heart of Hatteras; he made up his mind to outdo his audacious competitor and to reach the Pole itself.

For two years he had been living incognito in Liverpool, passing himself off as a sailor. He recognized in Richard Shandon the man he wanted; and he wrote anonymously to him and to Dr. Clawbonny at the same time. So the *Forward* had been built, manned, and equipped.

Hatteras had taken great care to conceal his name, for otherwise he would not have found a solitary man to accompany him. He was determined not to take the command of the brig except in an emergency, and when his crew had gone too far to draw back. He had in reserve, as we have seen, such rewards to offer to the men that not one of them would refuse to follow him to the end of the world; and, in fact, it was exactly to the end of the world that he meant to go.

Circumstances had become critical, and he had made himself known. His dog, faithful Duk, the companion of his voyages, had been the first to recognize him. Luckily for the brave and unluckily for the timid, it was well and duly established that John Hatteras was the captain of the *Forward*.

CHAPTER XIII

THE CAPTAIN'S PLAN.

HIS sudden appearance evoked a varied response from the crew, some whole-heartedly rallied round him, either from love of money or from daring, others submitted because they could not help it, reserving their right to protest later—resistance to such a man seemed, at the moment, difficult. Each went back to his post.

20th May being a Sunday and hence a day of rest, the captain held a council of his officers, Shandon, Wall, Johnson, and the doctor.

"Gentlemen," he said, in a voice at once gentle and imperious which characterized him—as you know, I mean to reach the Pole. I want to have your opinion. Shandon, what do you think about it?"

"It's not my place to think, Captain," Shandon replied coldly, "I've only got to obey."

Hatteras was not surprised at the answer.

"Richard Shandon," he continued, no less coldly, "kindly tell me what you think about our chances of success."

"Very well, Captain," answered Shandon, "the facts will speak for me—all such attempts so far have failed, I hope we shall be luckier."

"We shall be? What do you think, gentlemen?"

"As far as I'm concerned," replied the doctor, "I think your plan is quite practicable—some day explorers will certainly reach the Pole, and I don't see why the honour shouldn't be our own."

"There's much in our favour," answered Hatteras, "we've taken every precaution, and we shall profit by the experience of our predecessors. And now, Shandon, please accept my thanks for the care you took in fitting out this ship, there are a few evil-disposed fellows amongst the crew that I shall have to bring to reason, but on the whole I have nothing but praise to give you."

Shandon bowed coldly. His position on the *Forward*, which

he had hoped to command, was invidious. Hatteras understood this, and did not press him further.

"As to you, gentlemen," he continued, turning to Wall and Johnson, "I could not have secured the co-operation of officers braver and more experienced."

"Well, Captain, I'm your man," answered Johnson, "and although your enterprise seems a little on the daring side, you can count on me to the end."

"And on me, too," said James Wall.

"As to you, Doctor, I know what you are worth."

"You know more than I do, then," the doctor replied at once.

"Now, gentlemen," continued Hatteras, "it is well you should know the undeniable facts on which I base my hopes. In 1817 the *Neptune* got up to the north of Spitzbergen, as far as the eighty-second degree. In 1826, the celebrated Parry, after his third voyage to the Polar Seas, starting also from Spitzbergen Point, and using sledge-boats, went a hundred and fifty miles northward. In 1852 Captain Inglefield entered Smith Sound as far as seventy-eight degrees thirty-five minutes latitude. All these vessels were English, and Englishmen, our countrymen, commanded them."

Here Hatteras paused.

"I ought to add," he continued, with a constrained look, and as though the words could not leave his lips— "I must add that, in 1854, Kane, the American, commanding the brig *Advance*, went even higher, and that his lieutenant, Morton, crossing the ice-fields, raised the flag of the United States beyond the eighty-second degree. This said, I shall not return to it. But what you must know is this, that the captains of these vessels found that in the highest latitudes there is a Polar basin entirely free from ice."

"Free from ice!" exclaimed Shandon, interrupting him, "that's impossible!"

"You will notice, Shandon," Hatteras replied quietly, his eyes momentarily gleaming, "that I quote names and facts. I may even add that during Captain Parry's stay beside Wellington Channel, in 1851, his lieutenant, Stewart, also found himself on an open sea, and this observation was confirmed when Sir Edward Belcher wintered, in 1853, in

Northumberland Bay, at seventy-six degrees fifty-two minutes north and ninety-nine degrees twenty minutes west. The reports are incontestable, and it would be most unfair to deny them."

"But, Captain," Shandon pointed out, "those reports so much contradict—"

"You're wrong, Shandon," cried Dr. Clawbonny, "these reports do not contradict any scientific statement—as perhaps the captain will let me tell you."

"Go ahead, Doctor," answered Hatteras.

"Well listen to this, Shandon; it's clear from such facts as the isothermal lines that the coldest point of the globe is not at the Pole itself; like the Magnetic Pole, it's several degrees away. The calculations of the physicists show that in our hemisphere there are two centres of coldness, one in Asia at seventy-nine degrees thirty minutes north and a hundred and twenty degrees east, and the other in America at seventy-eight degrees north and ninety-seven degrees west. It's with the latter that we're dealing, and you see, Shandon, that it's more than twelve degrees below the Pole. Well, I ask you why shouldn't the Polar Sea be as free from ice as the sixty-sixth parallel is in summer—that is the south of Baffin Bay?"

"That's what I call well said," replied Johnson. "Dr. Clawbonny talks like a book."

"It seems quite likely," chimed in James Wall.

"All guess-work," answered Shandon obstinately.

"Well, Shandon," said Hatteras, "let's consider both possibilities; either the sea is free from ice or it isn't, and either way it won't keep us from reaching the Pole. If the sea is open the *Forward* will take us there without any difficulty; if it is frozen we shall set out on our sledges—and that, you will agree, isn't impracticable. When once our brig has reached the eighty-third degree we shall only have six hundred miles to cross before reaching the Pole."

"And what are six hundred miles?" put in the doctor. "when we know that a Cossack, Alexis Markoff, traversed the frozen sea along the north coast of the Russian Empire, in dog-sledges, over a distance of eight hundred miles in twenty-four days?"

"Do you hear that, Shandon?" asked Hatteras; "can't Englishmen do as well as a Cossack?"

"Of course they can," cried the impetuous doctor.

"Of course," added the boatswain.

"Well, Shandon?" asked the captain.

"I can only repeat what I said before, Captain," Shandon replied coldly, "I shall obey."

"Very good. And now," continued Hatteras, "let us consider our position. We are trapped by the ice, and I think it impossible, for this year at least, to get into Smith Sound. Well then, this is what I suggest."

Hatteras opened on the table one of the excellent maps published in 1859 by order of the Admiralty.

"Be kind enough to follow me. If Smith Sound is barred to us, Lancaster Strait, on the west coast of Baffin Bay, is not. I think we ought to sail that way to Barrow Strait, and then on to Beechey Island; this route has been followed a hundred times by sailing vessels and with a screw we'll do it easily. Once at Beechey Island, we shall follow Wellington Channel as far north as we can, up to its junction with Queen's Channel, at the very point where they sighted the open sea. It's now only 20th May; in a month, if all goes well, we'll get there, and then we'll make straight for the Pole. What do you think, gentlemen?"

"It's plain that's the only route to follow," replied Johnson.

"Very well, we will take it tomorrow. I shall let them rest today, as it's a Sunday. Shandon, you will take care that Bible readings are made regularly; a religious service has a beneficial effect on the minds of men, and a sailor above all needs to trust in the Lord."

"Very good, Captain," answered Shandon, going out with the lieutenant and the boatswain.

"Doctor!" said Hatteras, glancing after him, "there's a man whose pride is wounded; I can't rely on him any longer."

Early next day the captain had the boat lowered to reconnoitre the icebergs nearby; their breadth did not exceed 200 yards. He noticed that a slow pressure of the ice was threatening to reduce the size of the basin, so it was imperative to make a gap to keep the ship from being crushed as though

in a monstrous vice. The methods he used displayed his energy.

He first had steps cut in the ice-wall, and by their aid he mounted to the summit of an iceberg. From that point of vantage he saw that it would be easy to blast out a road towards the south-west. He ordered a mine to be dug almost into the heart of the berg, and this work, rapidly carried out, was completed by noon on Monday.

He could not rely on his eight- or ten-pound blasting cartridges, which would have had no effect on such masses as those, and could be used only to shatter the ice-fields. He therefore had a thousand pounds of powder placed in the mine, whose direction had been carefully calculated. It was provided with a long fuse, covered with gutta-percha, leading to the open. The gallery which led to the mine was filled with snow and lumps of ice, which the cold of the following night made as hard as granite. The temperature, under the influence of an easterly wind, had fallen to 12°.

At seven the next morning the *Forward* was kept under steam, ready to take advantage of the smallest gap. Johnson was given the duty of setting fire to the fuse, calculated to burn for half an hour before touching off the mine. That gave him plenty of time to regain the brig; ten minutes after having obeyed the order he was again at his post. The crew remained on deck, for the weather was dry and bright.

Hatteras was standing on the poop, with Shandon and the doctor; chronometer in hand, he was counting the minutes. At eight-thirty-five a dull explosion was heard, not nearly so loud as might have been expected. The outline of the ice mountains was transformed as though by an earthquake, thick white smoke rose high into the air, and long crevices appeared in the iceberg, whose upper half fell in fragments around the *Forward*.

But the lead was not yet free; large blocks of ice were still poised above it on the icebergs nearby, and there was every reason to fear that they would fall and close it up.

Hatteras took in the situation at one glance. "Wolsten!" he cried.

The gunsmith hastened up. "Yes, Captain?"

"Load the bow gun with a triple charge and wad it as tightly as you can."

"Are we going to attack the mountain with cannon-balls?" enquired the doctor.

"No," answered Hatteras, "that would do no good. No shot, Wolsten, only a triple charge of powder. Look sharp!"

A few minutes later the gun was loaded.

"What does he mean to do without any shot?" Shandon muttered between his teeth.

"We shall soon see," answered the doctor.

"Ready, Captain!" shouted Wolsten.

"All right!" replied Hatteras. "Brunton! Stand by! A few turns ahead."

Brunton opened the valves, and as the screw turned the *Forward* neared the shattered iceberg.

"Aim at the lead!" the captain ordered. The gunner obeyed, and when the brig was only half a cable's length from it Hatteras gave the order:

"Fire!"

A loud explosion followed, and the ice-blocks, shaken by the disturbance of the air, were suddenly hurled into the sea.

"Full steam ahead, Brunton! Straight for the lead, Johnson!"

The latter was at the helm; the brig, propelled by her screw, which churned in the foaming waves, sped into the middle of the newly-opened lead; it was perfectly timed, for scarcely had she cleared the opening than it closed up again behind her. It was a tense moment, and on the ship there was only one heart unshaken - that of the captain.

The crew, astonished at the manoeuvre, burst into cheers:

"Hurrah for Captain Hatteras!"

THE QUEST FOR FRANKLIN

ON Wednesday, 23rd May the *Forward* resumed her adventurous cruise, skilfully avoiding the pack-ice and the icebergs. Thanks to steam, that obedient force which so many Arctic explorers lacked, she seemed to be playing a game with the moving floes and to feel the hand of an experienced master like a horse with an able rider she obeyed her captain's every wish.

The temperature rose at six in the morning, to 26° , at six in the evening to 29° , and at midnight to 25° —the light wind was blowing from the south-east.

On Thursday towards three in the morning, the *Forward* sighted Possession Bay on the Canadian coast; then came the entrance to Lancaster Sound and then a glimpse of Burney Cape. A few Esquimaux pulled off towards her, but Hatteras had no time to wait for them. The Byam-Martin peaks, overlooking Cape Liverpool were sighted to the left, and soon disappeared in the evening mists which also obscured Cape Hay. Its point is so low-lying that it gets confounded with the off-shore ice and thus often makes exploration of the Polar seas extremely difficult.

Puffins, ducks and white sea-gulls showed up in large numbers. The *Forward* was then at $74^{\circ} 01' N$ and $77^{\circ} 55' W$ and the snowy crests of two mountains, Catherine and Elizabeth, rose above the clouds.

On Friday, at six Cape Waunder was passed on the right side of the strait and on the left Admiralty Inlet, a bay little explored by navigators who are generally in a hurry to sail west.

The sea grew rough, and the waves often swept the deck with the fragments of ice they threw into the air. To the north, the high table-lands almost level and reflecting the sun's rays, had a very strange appearance.

Hatteras wanted to cruise along the north coast, to reach Beechey Island and the entrance to Wellington Channel.

quickly, but to his great annoyance the continual icebergs compelled him to follow the southern channels. Hence, on 26th May, in a thick fog, mingled with snow, the *Forward* was abreast of Cape York, a tall and almost perpendicular cliff. The weather cleared a little, and the sun, towards noon, appeared for an instant, allowing bearings to be taken: $74^{\circ} 4' \text{ N.}$ and $84^{\circ} 23'$, near the end of Lancaster Strait.

Hatteras showed the doctor on the map the route he had taken, and the one he meant to follow. Their position was then very interesting.

"I should like to have been farther north," he explained, "but no one can do the impossible; see, this is where we are, near Cape York. We're at these cross-roads, swept by every wind, and formed by the intersection of Lancaster Strait, Barrow Strait, Wellington Channel and Regent Passage; this is a point which all travellers in these seas have to pass."

"Well," replied the doctor, "they must have found that puzzling: these cross-roads without any sign-post to tell them which one to take! How did they manage?"

"They didn't manage at all, they were managed; they had no choice, I can assure you; some of them found Barrow Strait closed, and next year somebody found it open; sometimes the vessel was irresistibly swept towards Regent Passage, and so at last we got our knowledge of these complicated seas."

"What a strange region!" said the doctor, studying the map. "It's all in fragments, all ripped to pieces, without any order or logical arrangement. It looks as if the land near the North Pole had been cut up like this especially to make it harder to reach, while in the south it tapers into points like Cape Horn, the Cape of Good Hope, and India. Was it the greater speed of the equator which caused this, while the more remote lands, still fluid from the creation, couldn't get condensed or agglomerated together, because they weren't turning fast enough?"

"It must be something like that, for everything on earth is subject to law, which God often lets men discover; so, Doctor, let's take advantage of His permission."

"I'll be very careful how I do that, Captain," replied the doctor, muffling himself up as best he could, "but the wind here is something dreadful."

"Yes, the north wind is raging and it's driving us off course."

"Anyhow, it ought to drive the ice southwards, and clear the way for us."

"It ought to, Doctor, but the wind doesn't always do what it ought. Look, that ice-bank seems impenetrable. Never mind, we'll try to reach Griffith Island and get round Cornwallis Island into Queen's Channel without traversing Wellington Channel. But I shall have to land at Beechey Island to renew my supply of coal."

"What do you mean?" asked the astonished doctor.

"I mean that, by order of the Admiralty, large stocks were left on that island on purpose to supply future expeditions, and although Captain McClintock took some in 1859, there'll be some left for us."

"By the by," said the doctor, "these parts have been explored for the last fifteen years, and since proof was found of Franklin's death, the Admiralty has always kept five or six vessels in these waters. Unless I'm mistaken, Griffith Island, which I see there on the map, almost in the middle of the cross-roads, is a general rendezvous for navigators."

"That's true enough, Doctor; and the result of that ill-fated expedition was to make these distant regions better known."

"That's right, Captain, for since 1845 expeditions have been very numerous. It was not until 1848 that we began to get anxious about the disappearance of the *Erebus* and the *Terror*, Franklin's two vessels. Then his old friend, Dr. Richardson, though seventy years of age, went to Canada and down the Coppermine River to the Polar Sea. Meanwhile, James Ross took the *Enterprise* and *Investigation* from Uppernawik to Cape York, where we are now. Every day he threw a barrel full of papers into the sea, to make his whereabouts known. In the mists he had his cannon fired, and at night sent up sky-rockets, touched off Bengal lights, and kept very little under sail.

"In Port Leopold, where he wintered from 1848 to 1849, he caught a number of white foxes, and had brass collars, engraved with details of the ships and the store depots, fastened round their necks; then he sent them off in all directions. Next spring he began to search the North Somerset coast on sledges through dangers and privations which made

almost all his men ill or lame. He also built cairns enclosing brass cylinders with enough information to guide the lost expedition.

"While he was away his lieutenant, McClure, explored the northern coasts of Barrow Strait, but without result. Two of Ross's men have now become famous—McClure, who traversed the North-West Passage, and McClintock, who found the traces of Franklin's expedition."

"Yes; they're two fine English captains. You know the history of these seas well, Doctor, and it will help us if you tell us about it. We can always learn something by hearing about them."

"Well, about James Ross: he tried to reach Melville Island by a more westerly course, but he nearly lost his two vessels, for he was caught by the ice and driven back into Baffin Bay."

"Driven back?" repeated Hatteras, wrinkling his brows; "forced back against his will?"

"Yes, and without having discovered anything," continued the doctor; "and ever since that year, 1850, English vessels have never ceased to plough these seas, and a reward of twenty thousand pounds was offered to anyone who might find the crews of the *Erebus* and *Terror*. Many were the attempts made to earn it, and at last McClintock pushed on as far as Melville Island and Cape Dundas: it was then that he found traces of Franklin's having wintered on Beechey Island in 1845."

"Yes," answered Hatteras, "three of his sailors had been buried there—three men luckier than the others!"

The doctor nodded approvingly and went on with his description of the attempts made to rescue the Franklin expedition. "In the course of these," he added, "in 1852 and '53 McClure discovered the North-West Passage without learning anything of Franklin's fate. At last tidings reached England that two vessels, abandoned in the midst of the ice-fields, had been observed near the coast of Nova Scotia.

"Lady Franklin at once chartered the little steamer, *Isabelle*, and Captain Inglefield, after cruising up Baffin Bay as far as Victoria Point on the eightieth parallel, returned to Beechey Island no more successful than his predecessors. At the beginning of 1855, Grinnell, an American, fitted up a fresh expedition, and Captain Kane tried to reach the Pole——"

"But thank God he didn't," Hatteras interrupted him violently; "and what he didn't do we will!"

"I know, Captain," answered the doctor, "and I only mention it because that expedition is necessarily connected with the search for Franklin. But it had no result. I almost forgot to tell you that the Admiralty, regarding Beechey Island as the general rendezvous for such expeditions, instructed Captain Inglefield, of the steamer *Phoenix*, to take supplies of food to that island in 1853; Inglefield was accompanied by Lieutenant Bellot, and he lost that brave French officer who for the second time had shown his devotion to England. we can learn about this tragedy, as our boatswain, Johnson, actually witnessed it."

"Lieutenant Bellot was a gallant Frenchman," said Hatteras, "and England honours his memory."

"By that time," continued the doctor, "the Government seemed to have lost all hope. But Lady Franklin had not, and with the remnants of her fortune she fitted out the *Fox*, commanded by McClintock, who set sail in 1857, and wintered in the region where you took command. He reached Beechey Island on 11th August, 1858, and wintered a second time in Bellot Strait. In February 1859, he recommenced his search and on 6th May found the document which removed all doubt regarding the fate of the *Enterprise* and the *Terror*. He returned to England at the end of the year. That is all that has happened for fifteen years in these fatal regions, and since the *Fox* returned no vessel has tempted fortune among the dangerous seas."

"Well," replied Hatteras "we shall tempt it."

CHAPTER XV

DRIVEN SOUTH

TOWARDS evening the weather cleared, and land was clearly visible between Cape Sepping and Cape Clarence. The sea at the entrance to Regent Strait was open but, just as if it wanted to check the *Forward's* progress, an impenetrable ice-bank had formed just beyond Port Leopold.

Hatteras was greatly annoyed, but he did not show it; to force an entrance to Port Leopold he had to use explosives. He reached it on Sunday, 27th May; the brig was firmly anchored to the huge icebergs, as upright, as hard, and as solid as rocks.

The captain, with his dog, the doctor and Johnson, went ashore over the ice. Duk bounded joyfully, for since he had recognized the captain he had grown more sociable, though he still bore a grudge against some of the crew for whom his master felt no more friendship than the dog did.

The port was not then blocked by the ice usually heaped up there by the east wind; the hill-tops had become graceful snow-clad slopes. The house and beacon erected by James Ross were still fairly well preserved; but the food stores seemed to have been ransacked by foxes and bears, whose recent traces were plain to see. Human beings, too, had shared in the devastation, for there were indications of Esquimaux huts upon the shores of the bay.

The graves of the six sailors of the *Enterprise* and the *Investigator* were recognizable as low mounds; they had been respected by animals and men alike.

As he set foot for the first time on Arctic soil, the doctor felt deeply moved; it is hard to imagine how it touches the heart to see the remains of houses, tents, huts, and storehouses marvellously preserved by Nature in these frozen lands.

"Look," he told his companions, "there's the house which James Ross himself called Refuge Camp; if Franklin's expedition had reached it, they would have been saved. There's the engine which they abandoned here, and the stove by which

the crew of the *Prince Albert* warmed themselves in 1851. Everything is just as it was, anyone would think that Captain Kennedy had left only yesterday. Here's the long boat which sheltered him for several days, until he was rescued by Lieutenant Bellot, who braved the October temperature to reach him."

"He was a fine man," Johnson meditated. "I knew him well."

While the doctor was examining with all an antiquarian's enthusiasm the traces of previous winterings, Hatteras was collecting the remains of the food and fuel, but he found very little of either, and the next day was spent in taking them on board.

The doctor, without going too far from the ship, studied the country, and made sketches of its most remarkable features, as the temperature rose gradually and the heaped-up snow began to melt. He also collected specimens of the northern birds, and he saw some large seals coming up to breathe on the ice, but he could not shoot any of them.

Near the high-water mark he found a stone bearing the inscription:

(E. I.)

1849

indicating the visit of the *Enterprise* and *Investigator*.

He pushed on as far as Cape Clarence, where John and James Ross, in 1833, had waited so anxiously for the ice to break up. The soil was strewn with skulls and animal bones, and further traces of Esquimaux habitations could also be seen.

The doctor had thought of building a cairn on Port Leopold, containing a record of the visit and plans of the *Forward*, but Hatteras would not hear of this; he did not want to leave traces which might help a competitor, and, notwithstanding his good intentions, the doctor had to submit. Shandon protested against the captain's obstinacy, which would prevent any ships coming to their rescue, but Hatteras would not give way.

The work was complete by Monday night, and he again attempted to cruise northwards, breaking his way through the

ice-bank; but after several dangerous efforts he had to resign himself to retracing his path down Regent Channel. He would not stop at Port Leopold, for though open that day it might be closed on the next by an unexpected movement of the ice; this often takes place, and navigators have to be wary of it.

If Hatteras did not show his uneasiness, this did not keep him from feeling it inwardly. His one aim was to push northward, and here he was forced to put back south. Where would that take him? Should he have to go as far as Victoria Harbour, in Boothia Gulf? Would he find Bellot Strait open, and could he go up along Peel Strait by way of North Somerset? Or, on the other hand, would he, like his predecessors, find himself imprisoned for several winters, and have to use up his strength and his supplies? These fears were constantly in his mind, and he had to come to a decision.

Going about, he steered southwards down Prince Regent Channel. The *Forward*, more favoured than her predecessors, most of which had taken more than a month to descend the channel, had steam to help her, and she made her way rapidly between the icebergs.

Most of the crew were pleased at turning away from the north; they had little wish to reach the Pole and were scared of their captain's reputation, whereas he would have liked to go on regardless of consequences. But while in these seas it is all very well to go on, it is useless to run into danger.

The *Forward* rushed along under full steam, her smoke swirling round the gleaming angles of the icebergs: the weather kept changing from dry and cold to snowy fogs. Drawing little water, she cruised along the west coast; Hatteras did not wish to miss the entrance to Bellot Strait, for the only southern outlet to the Gulf of Boothia is the little-known Fury and Hecla Strait; if he missed Bellot Strait, he might be shut in with no hope of escape.

In the evening Elwin Bay was recognized by its high perpendicular rocks; on the Tuesday morning Batty Bay was sighted.

The doctor, his field-glasses to his eyes, studied the coast attentively. Perhaps he and Johnson were the only ones on board to take any interest in these deserted regions. Hatteras was always poring over his maps, and said little; this taci-

turnity increased as the brig got farther south; he often mounted the poop and there, his arms folded and his eyes lost in vacancy, he would stand for hours. His orders, when he gave any, were curt and rough. Shandon maintained a cold silence, and kept himself so much aloof that he ended by having nothing to do with Hatteras except when duty demanded it; James Wall was devoted to him, and regulated his conduct accordingly. The rest of the crew waited for something to turn up, ready to seize any opportunity of furthering their own interest. There was no longer that unity of thought and exchange of ideas so necessary to achieve anything worth while, and this Hatteras knew well enough.

During the day two whales were noticed rushing towards the south; a white bear was also seen and was shot at without success. The captain knew the value of time, and would not let the animal be hunted.

On Wednesday morning the end of Regent's Channel was reached: a headland on its west coast was followed by a deep indentation in the land. On consulting his map the doctor recognized the headland as Somerset House, also called Fury Point.

"There," he explained to his usual companion—"that's the very spot where the first English ship, sent here in 1815, was lost. During the third of Parry's Polar voyages the *Fury* was so damaged by the ice on her second wintering that her crew had to abandon her and return home on her consort the *Hecla*."

"That shows the benefit of having a consort," answered Johnson. "It's a precaution that Polar navigators shouldn't neglect, but Captain Hatteras isn't the sort of man to burden himself with another ship."

"Do you think he's being rash, Johnson?" asked the doctor.

"I? I don't think about it at all, Dr. Clawbonny. Do you see those stakes over where with some rotten tent-rags still hanging on them?"

"Yes; that's where Parry landed his provisions, and, if I remember rightly, the roof of his tent was a topsail."

"Everything must have altered greatly since 1825!"

"Not so much as you might think. John Ross owed the health and safety of his crew to that crude shelter in 1829, and

when the Prince Albert sent an expedition there in 1851, it was still standing; Captain Kennedy had it repaired nine years ago. It would be interesting to visit it, but Hatteras isn't in the mood to stop!"

"I dare say he's right, Dr. Clawbonny, if time is money in England, it's life here, and a day's—or even an hour's—delay might jeopardize the whole voyage. Let him do as he thinks best."

All day Thursday, 1st June, the *Forward* cut diagonally across Creswell Bay from Lury Point the coast rose towards the north in perpendicular rocks 300 feet high. Towards the south it tended to get lower, some of the snow-clad summits looked like neatly-cut tables, while others were shaped like pyramids, or took other strange forms, their crests projecting into the fog.

The weather grew milder during that day, but was not so clear. Land was lost to sight, and the thermometer went up to 32°, sea-fowl fluttered around and flocks of wild ducks could be seen flying towards the north. The crew were able to shed some of their garments and the influence of the Arctic summer began to be felt.

Towards evening the *Forward* doubled Cape Gatty at a quarter of a mile from the land where the soundings gave from two to twelve fathoms, thence she kept just off-shore as far as Brentford Bay. It was at this latitude that Bellot Strait was discovered by Kennedy in April 1857, and he called it after his lieutenant, Bellot, as "a just tribute", he explained, "to the important services rendered to our expedition by the French officer".

CHAPTER XVI

THE MAGNETIC POLE

HATTERAS felt his anxiety increase as he neared the strait, on this the fate of his voyage depended. So far he had done better than his predecessors, the luckiest of whom, McClintock, had taken fifteen months to reach this point. But this mattered little if he could not succeed in clearing Bellot Strait, unable to retrace his steps, he would be hemmed in till the following year.

He entrusted the look-out to nobody else. On Saturday morning he spent hours in the crow's nest.

The crew fully realized the position. Profound silence reigned on board. The engine slowed down, and the *Forward* kept close inshore of the coast but fled with icebergs, which the warmest summers do not melt, and only an experienced eye could find the way between them.

Hatteras consulted the compass with the land, and as the sun appeared for an instant towards noon he had bearings taken, these were shouted up to him. The crew suffered the tortures of anxiety for half the day, but towards two there came a call from the mainmast.

"Steer west—full steam ahead!"

The brig at once obeyed, her helm was thrust over, the sea foamed around her prow and she dashed between two turbulent streams of ice. The channel found, Hatteras descended to the deck and the ice-master took his place.

"Well, Captain," said the doctor, "so we're in the famous strait at last."

"Yes," answered Hatteras, lowering his voice, "but getting in isn't everything, we've got to get out again." With these words he went back into his cabin.

"He's right," the doctor meditated, "it's like being in a mousetrap with hardly enough space to move, and if we do have to winter in the strait! . . . Well, we shan't be the first that have had to do it, they got out of it, and so shall we."

Bellot Strait is seventeen miles long and a mile wide, and

sixty or seventy feet deep, so it will be realized it does not leave much elbow-room for shipping. Between mountains whose height is estimated at 1600 feet, it separates North Somerset from Boothia Land.

The *Forward* advanced cautiously, but she did advance; tempests are frequent in that narrow waterway, and she did not escape them; by Hatteras's order the yards were lowered and the masts left bare; yet notwithstanding all precautions, she laboured heavily, the waves dashed over her amidst squalls of rain, and her smoke swirled eastwards with astonishing speed; her course through the moving ice was uncertain; the barometer fell to 29 inches; it was difficult to keep on deck, and most of the men stayed below so as not to suffer needlessly.

Hatteras, Johnson, and Shandon remained on the poop in spite of the flurries of snow and rain; as usual the doctor had asked himself what would be the most disagreeable thing he could do, and at once answered himself by going on deck; as they could not hear and could hardly see one another, he kept his thoughts to himself.

Hatteras tried to see through the fog; he calculated that they would reach the end of the strait at six, but at that time all egress seemed impossible; he had to wait and anchor the brig to an iceberg; but he kept steam up all night.

The weather was frightful. Every moment the *Forward* threatened to break her anchor-chains; there was danger that the iceberg to which they were anchored, torn away at its base by the violent west wind, would drift bodily away with her. The officers were constantly on the look-out and extremely anxious; with the snow was mingled a hail of ice, ripped away from the surface of the bergs by the strength of the wind; the air seemed to bristle with arrows.

During this terrible night, the temperature rose surprisingly; the thermometer marked 57°, and the doctor was amazed when he thought he saw flashes of lightning in the south, followed by the roar of thunder. Similar meteorological effects have been noticed by other explorers.

Towards five in the morning, the weather changed with astonishing speed; the temperature went down to freezing-point and the wind veered north and dropped. The western exit from the strait was in sight, but it was completely blocked

up and Hatteras stared eagerly at the coast, wondering if the channel really existed.

At last the brig got under way, and glided slowly amongst the ice-streams, which rattled noisily against her planks, the packs were from six to seven feet thick, and the pressure had to be avoided, for even if the brig could withstand it, she would run the risk of being lifted up and heeling over on her side.

At noon, for the first time, they could admire a magnificent solar halo with two parhelia, the doctor studied and measured it: the outer halo was only visible for about 30° on each side of the sun, the two mock-suns were remarkably clear, the colours of the luminous haloes, from inside to out were red, yellow, green, and a very light blue which merged imperceptibly into white. The doctor remembered the ingenious theory of Thomas Young, that clouds formed of prisms of ice are suspended in the air, and that they decompose the rays of light which fall on them. On this theory haloes cannot be formed when the sky is clear: the doctor thought this very probable.

Sailors accustomed to the northern waters generally consider such haloes as the precursor of heavy snow, and if they were right the position of the *Forward* would become very difficult. Hatteras, therefore, decided to push on at full speed, for the rest of the day and the next night he snatched not a minute's rest, sweeping the horizon with his telescope, and taking advantage of the smallest opening so as to lose no opportunity of getting out of the strait.

But in the morning he had to stop before the impenetrable ice-bank. The doctor joined him on the poop, and they went aside where they could talk without fear of being overheard.

"We're trapped!" Hatteras told him, "we can't get any farther."

"But isn't there any way out?" asked the doctor.

"None. All the powder in the *Forward* wouldn't help us to gain half a mile!"

"What are we to do then?" asked the doctor.

"I don't know. This cursed year has been against us right from the outset."

"Well," answered the doctor, "if we must winter here, we must. One place is as good as another."

"But," said Hatteras, lowering his voice, "we must not winter here, especially during June. Wintering is full of risks to body and mind. The crew would be demoralized with nothing to do in the face of real suffering. I had hoped to be able to stop much nearer the Pole than this."

"Yes, but Fate decreed that Baffin's Bay should be closed."

"It was open enough for that American!" cried Hatteras in an outburst of temper.

"Come Hatteras," the doctor deliberately interrupted him, "we're still only at 5th June. Let us despair. A lead may suddenly open before us. You know that the ice tends to break up into smaller blocks even in the coldest weather, as if some repulsive force were acting upon it. In an hour or so we may find the sea open."

"If that happens we'll take advantage of it. It's quite likely that, once out of bellot Strait, we can go north by Peel Strait or McClintock Channel and then —"

"Captain," said June Wall, who had come up at that moment, "we risk having our rudder stopped in all this ice."

"Well," answered Hatteras, "we shall have to risk it. I won't have it unshipped. We must be ready day and night. You must do all you can to protect it by keeping it clear of the ice, Mr. Wall. I can't have it unshipped."

"But — Will protect it."

"I didn't ask for your advice!" the captain told him severely. "Go!" and Wall went back to his post.

"I would give five years of my life," Hatteras declared, "to be up north. I don't know any channel more dangerous than this. To add to our troubles the compass has no help at all now we're so near the Magnetic Pole: the needle keeps shifting about."

"I must say," the doctor answered, "navigation here is dangerous, but we knew what we had to expect when we set out, and it ought not to take us by surprise."

"Ah, Doctor, my crew is no longer what it was, the officers are beginning to air their views. I could get the men to do what I want by offering them a reward, but that has its bad side, for it makes them want to get back to collect it. Doctor, I'm not getting proper support, and if I fail it won't be the

fault of such and such a seaman but the ill-will of my officers. But they shall pay for it."

"You're exaggerating, Hatteras."

"I'm not exaggerating at all! Do you think the crew is sorry about the obstacles that I keep meeting? On the contrary, they hope they'll make me abandon my plan. They aren't complaining now, and they won't as long as the *Forward* heads for the south. The fools! They think they're getting nearer England! But once let me go north and you'll see how they'll change! I swear though that no human being will make me swerve from my course. Only let me find a lead a cranny wide enough to take my ship, even if it rips off her copper sheathing, and I'll have the best of them!"

One of the captain's wishes that was soon fulfilled. There was a sudden change during the evening, under some action of the wind, the current or the temperature: the ice-fields split up and receded, leaving the ice with her steel prow she sailed on all night, and next morning about six she had cleared her way.

But what was the disaster? Hatteras, at finding it was to the north completely blocked, he had no other strength of character to bid him disappointment, and as if the only channel open were the one he preferred, he took the *Forward* back down Franklin Strait, not able to get up Peel Strait, he headed round Prince of Wales Land into McClintock Channel. But he realized he could not deceive Sham-on and Wall.

6th June was successful: the day was full of snow, and the warming of the air was full of ice.

For thirty-six hours the *Forward* followed the windings of the coast of Peckham, not able to approach Prince of Wales Land. Hatteras put a full steam on the ship, using up his coal, hoping to reach on 6th July. On the 11th day, he reached the end of Franklin Strait, there, in he found the road to the north blocked up.

It was enough to make him despair: he could not even retrace his steps, the iceberg thrust him onward, and he saw the leads close up behind him as if there never had been any open sea where he had passed an hour before.

Not only, therefore, was the *Forward* kept from going

northwards, she could not heave to an instant for fear of being trapped, and she fled before the ice as though before a storm.

On Friday, 8th June, they arrived near the short of Boothia Land, at the entrance to James Ross Strait, but this they had to avoid, as its only exit is to the west, off the Canadian coast.

Bearings taken at noon gave $70^{\circ} 5' 17''$ N. and $96^{\circ} 46' 45''$ W.; when the doctor heard this he consulted his map, and saw they had reached the Magnetic Pole, exactly where James Ross, the nephew of Sir John, had located it. The land was low near the coast, but about a mile inland it rose slightly, to about sixty feet. The boiler wanted cleaning, so the captain had the brig anchored to an ice-field, and let the doctor and the boatswain go ashore. He himself cared for nothing but his own project, and he stayed in his cabin, poring over his map.

The doctor and his companion easily succeeded in reaching land; the doctor took a compass to make experiments with: he wanted to confirm James Ross's observations. He easily discovered the limestone cairn which Ross had raised, and he eagerly ran towards it; an opening showed him within it the tin in which Ross had placed the official record of his discovery. No human being seemed to have visited this desolate coast for the last thirty years.

Here a magnetized needle, suspended as delicately as possible, at once takes almost a vertical position under the earth's magnetic field; so if the centre of attraction were not immediately below the needle, it could only be a short distance away.

The doctor made the experiment carefully, and found that the imperfect instruments used by James Ross had given his vertical needle a declination of $89^{\circ} 58'$; the real magnetic point was only a few paces away, and here Clawbounny was delighted to see his needle indicate a declination of 90° .

"This is the exact site of the North Magnetic Pole," he explained, tapping the ground with his foot.

"Just here?"

"Just here."

"Then," said the boatswain, "we must give up that idea of a magnetic mountain or some huge mass of lodestone?"

"Of course," laughed the doctor, "that mountain was only a wild guess. As you see there's not the slightest trace of a

magnetic mountain big enough to attract a ship and rip away all the iron in it, its anchor, down to its very nails. Here your shoes, with their iron nails, are as safe as they are anywhere else."

"Then how do you explain—"

"I don't explain anything, Johnson, we don't know enough for that. But it is certain, exact—mathematically certain—that the Magnetic Pole is here, in this very spot."

"Ah, Dr. Clawbonny! How happy the captain would be if he could say as much for the real North Pole!"

"He'll say it some day, Johnson, he'll say it!"

"God grant he does," the boatswain answered.

He and the doctor raised a cairn on the exact spot where they had made the experiment. Then, having been signalled back to the ship, they returned on board at five in the evening.¹

¹ The obvious idea that the earth's magnetism might be accounted for by a mass of lodestone near the North Pole is very old. A map published by Johannes Ruysch in 1713 shows the Arctic dotted with islands, and the caption explains that iron-built ships can never get away because there is a lodestone rock a hundred miles across close to the Pole. The idea of a magnetic mountain elsewhere than at the Pole but able to rip the iron out of a ship is older still.

Later Verne used this idea very ingeniously in his story of Antarctic Exploration "*L'Exploration des Glaces*—this is a sequel to an unfinished story by Edgar Allan Poe—and both are included in the Fitzroy Edition under the title "*The Mystery of Arthur Gordon Pym*."

Verne does not make it clear whether Dr. Clawbonny knew that the North Magnetic Pole does not stay at one point but has a gradual motion; this might account for the discrepancy between his readings and those of James Ross. 101

THE FATE OF SIR JOHN FRANKLIN

THE *Forward* succeeded in crossing James Ross Strait, but not without difficulty, the crew had to use the saws and excavate mines until they were utterly worn out. Fortunately the temperature was bearable at about 34° .

On Saturday, as they doubled Cape Felix at the northern end of King William's Land, the crew were distressed, and many a sad inquisitive look was turned towards the island, for this was the scene of the most terrible tragedy of modern times. Some miles to its west the *Erebus* and the *Terror* had been lost for ever.

The sailors had heard of the efforts made to find Sir John Franklin, but they knew nothing of the affecting details of the catastrophe. While the doctor was following the course of the ship on his map, several of them came up to talk to him and the others soon followed, so that at last he found himself surrounded by almost the whole crew. Realizing what an impression the narrative would make, he continued the conversation he had begun with Johnson while the coast with its bays and promontories, passed like an immense panorama before their eyes.

"You know how Franklin went to sea, my friends. He was a cabin-boy like Cook and Nelson, after having served during his youth in several great maritime expeditions, he decided in 1845 to set out in search of the North-West Passage, he commanded the *Erebus* and the *Terror*, two vessels tried and tested for they had been employed in Antarctic exploration under James Ross. The *Erebus* had a crew of seventy with Lieut-James as captain, the *Terror* had sixty-eight under Captain Crozier. The map bears the names on its capes, straits, points, and channels, of the leaders of these unfortunate men, not one of whom was ever again to see his native land—a hundred and thirty-eight in all!"

"We know that Franklin's last letters were despatched from

Disko Island, and were dated 12th July, 1845. 'I hope,' he said, 'to get under way tonight for Lancaster Strait.' What happened after he left Disko Bay? The captains of two whalers, the *Prince of Wales* and the *Interprise*, sighted his two ships in Melville Bay for the last time, and since then nothing has ever been heard of them. However, we can follow Franklin in his westerly course—passing through Lancaster and Barrow Straits, he arrived at Beechey Island where he spent the winter of 1845."

'But how do you know all this?' asked Bell, the carpenter.

"By three tombs which the Arctic expedition found on that island in 1850. Three of Franklin's sailors were buried there, and a document which was found by Lieutenant Hobson, of the *Fox*, 25th April 1847, snowed that after their wintering, the *Erebus* and the *Terrace* went up Wellington Strait as far as the seventy-seventh parallel, but instead of pushing on farther northwards which may have been impracticable, they returned south."

'And that was their final sad parting voice: "Safety lay to the north!"'

Everybody turned round. Hatteras leaned on the poop-rail, had just made that terrible comment.

"There's not the slightest doubt," returned the doctor, 'that Franklin meant to reach the northern American coast, but tempests stopped him, and on 1st September, 1846, the two ships were trapped by the ice a few miles from here, to the north-west of Cape Felix; they were harassed north-north-westwards to Victory Point over the high ice for point seawards."

"Now," he continued, "the ships were not abandoned till 22nd April 1847. What happened during the nineteen months? What did the wretched crew do? No doubt they explored their surroundings hoping to find a chance of safety, for the admiral was in no haste to give up, and if he did not succeed—"

"It may have been because his crew betrayed him," added Hatteras.

The sailors dared not raise their eyes: they knew these words were meant for themselves.

"In short, the fatal document tells us, too, that John

Franklin succumbed to fatigue on 11th June, 1847. Honour to his memory!" said the doctor, baring his head.

His audience silently followed his example.

"What became of the poor wretches for the next ten months after they had lost their chief? They stayed on board their ships, and did not decide to abandon them until April 1848. Then only a hundred and five men out of a hundred and thirty-eight were still living; thirty-three had perished! Captain Crozier and Captain FitzJames raised a cairn on Victory Point, and in it they placed their last document. See, my friends, we are passing that very point! You can still see the remains of the cairn placed, so to speak, on the farthest point which John Ross reached in 1831. There is Jane Franklin Cape. There is Franklin Point. There is Le Vesconte Point. There is Erebus Bay, where a boat made out of the wreckage of one of the vessels was found on a sledge. There were some silver spoons, plenty of ammunition, some chocolate and tea, and a few religious books. Led by Captain Crozier, the hundred and five survivors started for Great Fish River. Where did they get to? Did they manage to reach Hudson's Bay? Were there any survivors? What became of them after they set out?"

"I will tell you what became of them," Hatteras replied firmly. "Yes, they did try to reach Hudson Bay, and they split up into several parties. Yes, they did make for the south! A letter from Dr. Raw in 1854 says that in 1850 the Esquimaux had met on King William Land a detachment of forty men travelling across the ice, and dragging a boat; they were thin, emaciated, worn out by fatigue and suffering. Later thirty corpses were discovered on the continent and five on an island nearby, some half-buried, some left without burial, some beneath a boat turned upside-down, others under the remains of a tent; here an officer with his telescope slung over his shoulder and a loaded gun at his side, farther on a cooking-pot with the remains of a disgusting meal!

"When the Admiralty received these tidings, it requested the Hudson Bay Company to send its most experienced agents to the spot. They descended Back River to its mouth and visited the islands of Montreal and Maconochie, and Ogle Point. But they discovered nothing. All the poor wretches had

died from exposure, suffering and hunger, whilst trying to prolong their lives by the dreadful expedient of cannibalism. That is what became of them after they turned south, along a road strewn with their mutilated bodies! Well! Do you still wish to follow their footsteps?"

His agitated voice, his passionate gestures and his intense face, produced an indescribable effect. The crew, stirred by his emotion and the sight of this fatal land, cried with one accord: "To the north! To the north!"

"Yes, to the North! Safety and glory lie to the north. Heaven is on our side—the wind is changing; the lead is open! Prepare to go about!"

The sailors hurried to their posts; the ice gradually opened; the *Forward* made for McClintock Channel at full speed. Hatteras had been right in counting upon a more open sea; following the route supposed to have been taken by Franklin, he cruised along the western coast of Prince of Wales land. Clearly the ice had broken up towards the east, for this strait seemed entirely free; the *Forward* made up for lost time; on 14th June she sped along so quickly that she passed Osborne Bay and the farthest point reached by the expeditions of 1851. Icebergs were still numerous in the strait, but the sea did not threaten to be lacking below her keel.

CHAPTER XVIII

THE WAY TO THE NORTH

THE crew seemed to have returned to its habitual discipline and obedience. They had little fatiguing work to do, and plenty of leisure. The temperature kept above freezing-point, as if the thaw seemed to have removed the chief obstacles to navigation.

Duk, now sociable and familiar, had made great friends with Dr. Clawbonny. But as in all such fellowships, one has to give way to the other, and it was by no means the dog. Duk did what he liked, while the doctor showed him dog-like obedience. He was friendly with most of the sailors and officers but, no doubt by instinct, he shunned the society of Shandon; he showed his teeth and what teeth—to Pen and Foker; venting his hatred of them whenever they came near. But they dare not now attack the captain's dog—his "familiar spirit" as Clifton called him. On the whole the crew had plucked up courage again and were working well.

"It seems to me," Wall said one day to Shandon, "that our men took the captain's speech seriously; they don't seem to doubt our success now."

"Then they're wrong!" Shandon answered. "If they stopped to reflect, if they looked at things, they'd see that we're going from one piece of foolishness into another."

"But," Wall continued, "the sea is open now, and we're getting back on to well-known routes; aren't you exaggerating a bit, Shandon?"

"No, I'm not exaggerating; it isn't my dislike of Hatteras or jealousy, whatever you like to call it, that's blinding me. Have you seen the bunkers lately?"

"No," answered Wall.

"Well, then, go and look; you'll soon see how near our supplies are to giving out. He ought to have stayed under sail, and kept the engine for currents and contrary winds; he ought to have economized very strictly with his coal; who can tell where we'll be held up, and for how long? But Hatteras is

crazy to push on and only thinks about getting to that inaccessible pole. Whether the wind is contrary or not, he goes ahead at full steam, and if that goes on, we'll soon be in a bad way if we're not completely lost!"

"Is that so, Shandon? Then things are very bad."

"Yes, it is, and not simply because the engines won't be any good without fuel, but because of the wintering we'll have to do sooner or later. We'll have to think about coal in a country where the mercury freezes in the thermometer."

"But, if I'm not mistaken, the captain counts upon renewing his supplies at Beechey Island, he ought to find plenty of coal there."

"Can we go where we like in the seas? Can we rely on finding the strait clear of ice? And if he misses Beechey Island and we can't reach it, what will become of us then?"

"You're right, Shandon. Hatteras seems uncommonly rash; but why don't you talk to him about it?"

"No," said Shandon, with ill-concealed bitterness, "I'm going to keep my mouth shut. I'm not responsible for the ship now, I'm waiting to see what turns up. I get my orders, and I obey them, and keep my opinion to myself."

"Then let me tell you you're wrong, Shandon, it affects all of us, and we may all suffer from the captain's rashness."

"Would he listen to me if I did speak?"

Wall dared not answer in the affirmative, he added, "But perhaps he'd listen to the crew."

"The crew?" answered Shandon, shrugging his shoulders; "they've got something else to think of than their own safety. They know they're nearing the seventy-second parallel, and that they'll earn a thousand pounds for every degree above that."

"You're right, Shandon, the captain knew the best way of holding them."

"Of course he did, for the time being at any rate he can do what he likes with them."

"What do you mean?"

"I mean that while there's no danger and not too much work, and the sea's open, they'll go on all right, but wait till difficulty and danger comes, illness, discouragement or cold, and you'll see how much they'll think about the money!"

"Then you don't think Hatteras will succeed?"

"No, he will not; to succeed in such a venture there must be a good understanding between him and his officers, and we haven't got it. Hatteras is mad; all his past career proves it. Well, we'll see; perhaps circumstances will force them to give the command to a less adventurous captain."

"Still," said Wall, shaking his head, "he'll always have some on his side——"

"Dr. Clawbonny, a scientist who cares only for science, and Johnson, a sailor who's a slave to discipline, and perhaps one or two more like Bell, the carpenter; four at the most and there's eighteen of us. No, Wall, Hatteras hasn't got the confidence of his crew, and he knows that well enough, so he bribes them; he took advantage of that Franklin business very cleverly, but that won't last, I tell you, and if he doesn't reach Beechey Island he's done for!"

"Suppose the crew takes it into their heads ——"

"Don't tell the crew what I think," Shandon told him earnestly; "they'll soon see for themselves. Besides, just now we must go north. Who knows if Hatteras won't find that way will take him back? At the end of McClintock Channel lies Melville Bay, and then there's the straits that lead to Baffin Bay. Hatteras must look out! The route to the east is easier than to the north!"

These words show that Hatteras was right in thinking that Shandon would betray him if he could, and Shandon was right in attributing the contentment of the men to the hope of gain, which dominated the minds even of the least enterprising of them. Clifton had worked out how much each would have. Without reckoning the captain and the doctor, who could not expect a share in the bounty-money, there remained sixteen men to divide it. Each degree gained meant that each man would receive over £60. If ever they succeeded in reaching the Pole, each would have £1125—a fortune. It would cost the captain £18,000 but he could afford it. These thoughts inflamed the minds of the crew, and they were now as anxious to go north as they had been eager to turn south.

On 16th June, the *Forward* passed Cape Aworth, and Mount Rawlinson raised its white peaks towards the sky; by exaggerating its distance, the snow and fog made it seem colossal.

The temperature still kept a little above freezing-point; cascades and improvised cataracts showed themselves on the sides of the mountains, and avalanches roared down with the noise of heavy artillery. The glaciers, spread out in long white sheets, producing dazzling reflections. Boreal nature, as it struggled against the thaw, offered a splendid spectacle.

The brig went very near the coast; on some sheltered rocks scattered clumps of heath were to be seen, the rose-coloured flowers lifting their heads timidly out of the snows; and some meagre lichens of a reddish colour and the shoots of a dwarf willow grew out of the soil.

At last, on 19th June, at the famous 72nd parallel, they doubled Cape Minto, at the end of Ommaney Bay. Then the brig entered Melville Bay, one of the largest seas in these regions, and first crossed by Captain Parry in 1819.

Clifton pointed out that there were two degrees from the 72nd to the 74th; that already placed £125 to his credit. But it was pointed out that a fortune wasn't worth much there, that it was no use being rich if he couldn't drink his riches, and that he had better wait till he could roll under the table of a Liverpool pub before he rejoiced and rubbed his hands.

CHAPTER XIX

THE WHALE HUNT

MELVILLE BAY, though easily navigable, was not free from ice; vast ice-fields stretched as far as the limits of the horizon; a few icebergs appeared here and there, but they were motionless, as if anchored in the midst of these frozen fields. The *Forward*, with all steam on, followed the broad leads where it was easy to navigate. The wind changed frequently, jumping from one point of the compass to another; the variability of the wind in the Arctic Seas is remarkable; sometimes a dead calm is followed in a few minutes by a violent tempest, as the *Forward* found to her cost on 23rd June.

The more constant winds mostly blew from off the ice-bank to the open sea, and were intensely cold. The thermometer fell several degrees; the wind veered south, and violent gusts, sweeping over the ice-fields, brought a thick snow along with them. Hatteras at once ordered the sails to be furled, but not quickly enough to keep his foresail from being carried away in the twinkling of an eye.

He manoeuvred his ship quite calmly, and did not leave the deck during the tempest, but he had to fly before the weather and turn westward. The wind raised enormous waves, in the midst of which swung blocks of ice of all sizes and shapes, torn from the surrounding ice-fields, the brig was tossed about like a child's plaything, and the fragments from the packs were thrown over her hull. One moment she was lying perpendicularly along the side of a liquid mountain with her steel prow concentrating the light, and shining like a bar of molten metal; then swept down into an abyss, emitting whirlwinds of smoke, while her screw, out of the water, raced with a sinister sound as its blades beat the air. Rain mingled with the snow and fell in torrents.

The doctor could not miss such an occasion of getting wet to the skin; he stayed on deck, a prey to that emotional amazement which a savant knows how to draw from such a spectacle. His nearest neighbour could not have heard him

peak, so he said nothing and watched; but whilst watching he saw something very strange, and peculiar to the hyperborean regions.

The tempest was confined to a restricted area, extending only about three or four miles, indeed, wind passing over the ice-fields loses much of its strength and can not carry its disastrous violence very far from time to time the doctor, through an opening in the tempest, noticed a calm sky and a quiet sea beyond the ice-fields. All the *Forward* needed to do to regain her peaceful waters was to traverse some of the leads again, but she ran the risk of being thrown on to one of the icebergs tossed by the swell.

After a few hours Hatteras succeeded in getting his ship into a calm water, while the violence of the hurricane, raging as far as the horizon, spent itself a few cables' length away.

Then Melville Bay no longer looked the same, driven by the winds and waves, numerous icebergs detached from the coast, were drifting northward, passing one another and colliding in every direction. There were several hundreds of them, but the bay is very wide, and the brig easily avoided them. The spectacle of these floating masses was magnificent, they seemed to be running a race on the open sea.

The doctor had got excited watching them, when Simpson the harpooner came up and pointed out the changing tints of the sea, which varied from a deep blue to olive green, long bands of colour stretched from north to south in such clear-cut lines that the eye could follow them out of sight. Sometimes a transparent sheet of water was side by side with one perfectly opaque.

"Well, Dr. Clawbonny, what do you think of that?" he asked.

"I agree with Scoresby, the whaler, regarding the different colour of the water, the blue water contains no animalcules or jellyfish, and the green water is full of them. He's made a number of tests and I think he's right."

"Well, sir, I know something else about the sea's colour, and if we were on a whaler I think we'd have good sport."

"But I don't see any whales," answered the doctor.

"It won't be long before you do, though, I can tell you. A

whaler is lucky when he meets with those green stripes at this latitude."

"Why?" asked the doctor, always interested in the talk of those who knew their job.

"Because it's in the green water whales are always found in the greatest quantities."

"What's the reason for that?"

"Because they find plenty of food in them."

"Are you sure of that?"

"I've seen it a hundred times in Baffin Bay; I don't see why it shouldn't be the same in Melville Bay. And, look there, Dr. Clawbonny," he added, leaning over the bulwarks.

"Why anyone would think it was the wake of a ship!"

"It's an oily substance that the whale leaves behind. Believe me, the animal it came from can't be far off!"

The atmosphere was impregnated with a strong oily smell, and the doctor watched the surface of the water carefully. The prediction of the harpooner was not long in being fulfilled. Foker shouted from the masthead, "A whale to leeward!"

All eyes were turned in that direction, where a jet of water could be seen rising from the sea about a mile away.

"There she blows!" cried Simpson, who knew what that meant.

"It's gone!" the doctor answered.

"We'd know how to find it again if we had to!" Simpson assured him regretfully.

To his great surprise, and though no one dared ask for it, Hatteras gave orders to man the whale-boat. Johnson went aft to steer her while Simpson stood, harpoon in hand, in the bow, and the doctor could not be kept from joining the expedition. The sea was pretty calm: the whale-boat soon put off, and ten minutes later she was a mile from the brig.

The whale had taken in another supply of air, and had dived again; but it soon returned to the surface and spouted a mixture of vapour and mucus from her blow-holes to a height of fifteen feet.

"There! There!" exclaimed Simpson, pointing to a spot about 800 yards from the boat. This was soon alongside the animal and, as it had been seen from the brig, she too came nearer.

As the waves rose and fell, the enormous cetacean vanished and reappeared, its black back looking like a reef in the open sea. Whales do not swim fast unless they are hunted, and this one was lazily cradled by the waves. The boat silently approached, following the band of green water whose opacity kept the animal from seeing its enemy. It is always a moving sight when a fragile boat attacks such a monster, this one was about 130 feet long—it is by no means rare, between 72° and 84°, to meet with whales over 180 feet long. (Ancient writers have described animals more than 700 feet long, but these have to be placed among the species classed as imaginary.)

The boat soon drew near the whale, at a sign from Simpson the men rested on their oars, then, brandishing his harpoon, the experienced sailor threw it with all his strength, plunging its barbs deep into the thick covering of fat.

The injured whale gave a powerful stroke of its tail and dived. The first oars were at once lifted perpendicularly, the harpoon line secured on to the bow, unrolled very rapidly and dragged the boat along, while Johnson steered it cleverly.

The whale raced away from the bug and made for the moving icebergs. Keeping on for half an hour, the men had to wet the harpoon-line to keep it from catching fire by friction. When the whale seemed to be going a little more slowly, the line was pulled in little by little and carefully coiled up.

Soon the animal reappeared, beating the surface with its formidable tail and making regular waterspouts fall in a violent rain on the boat, which was getting nearer. Simpson seized a long lance, and got ready to give closer battle.

Suddenly the whale slipped into a gap between two mountainous icebergs, making the hunt really dangerous.

"The devil!" exclaimed Johnson.

"Go ahead," cried Simpson, gripped by the excitement of the chase. "We've got her!"

"But we can't follow her among the icebergs!" protested Johnson, holding the boat on her course.

"Yes, we can!" exclaimed Simpson.

"No, no!" "Yes, yes!" came the shouts of the sailors.

During the argument the whale had got between two floating ice-mountains which the wind and the swell were

driving together. The boat was being dragged into this dangerous pass when Johnson rushed forward, axe in hand, and cut the line.

He was just in time, the two ice-mountains clashed together with irresistible force, crushing the unfortunate animal between them.

"The whale's gone!" exclaimed Simpson

"But we're saved!" replied Johnson

"Well," said the doctor, who hadn't batted an eyebrow, "that was worth seeing!"

The crushing force of these ice-mountains is enormous, and the whale had been the victim to an accident common in these seas. Scoresby related that in the course of one summer thirty whales perished in the same way in Baffin Bay. He had seen a three-master flattened in a minute between two immense walls of ice, which rushing together with frightful speed had swallowed her up bodily, and other vessels split apart, as if with a lance, by pointed icicles, 100 feet long, driven through their hull.

A few minutes later the boat hailed the brig, and was soon back in its usual place.

"That's a lesson," Shandon said loudly "for those rash enough to venture into the lead!"

CHAPTER XX

BELCHLY ISLAND

ON 25th June, the *Forward* sighted Dundas Cape at the north-western end of Prince of Wales Land. There the difficulty of navigating amongst the ice grew greater, for the sea is narrower, and the line formed by Crozier, Young, Day, Lowther, and Garret Islands like a chain of forts before a roadstead makes the ice-streams pile up in the strait. What the brig would have done in one day in other circumstances took her until the 30th, when she stopped and retraced her path waiting for a favourable chance of not missing Beechey Island, using up much of her coal, as the fires were only slackened down but never put out when she had to halt so that she might have steam up day and night.

Hatteras knew as well as Stanton the state of his fuel supply, but as he was certain of finding coal at Beechey Island, he would not lose a minute for the sake of economy. He had been much delayed by being driven southward, and though he had taken the precaution of leaving England before April, he did not find himself further advanced than preceding expeditions had been at the same season.

On the 30th Cape Walker was sighted at the north-eastern end of Prince of Wales Land. This cape is very high, and is remarkable for its reddish-brown colour. Hence, in clear weather, the view stretches as far as the entrance to Wellington Channel.

Towards evening, Cape Ballot came into sight. It is separated from Cape Walker by McLeon Bay and was given its name in the presence of the young French officer himself, while the English expedition honoured him with three cheers. In this region the coast consists of a yellowish limestone, and looks very rugged. It is defended by enormous icebergs piled up by the north winds in the most impressive style. It soon passed out of sight as the *Forward* cut her way through the ice to reach Beechey Island through Barrow Strait.

Hatteras was determined to go straight on and, so as not to

drift beyond the island he scarcely left his post for some days, often climbing to the masthead to look for the most advantageous channels. All that a seaman's pluck, skill, and coolness could do he did as they crossed the strait. Fortune certainly did not favour him, for the sea is usually more open at this season, but at last, by dint of sparing neither his steam, his crew, nor himself, he gained his end.

On 3rd July, at eleven in the morning, the ice-master announced land to the north. After taking his bearings, Hatteras recognized Beechey Island, that general rendezvous of the Arctic navigators; here come almost all the ships that venture into these waters. Hatteras knew that only two years before, on 11th August, 1855, McClintock had revictualled there and repaired the houses and stores.

The boatswain's heart beat with emotion at the sight of this island; when he last visited it he was quartermaster on the *Phoenix*; Hatteras questioned him about the coast-line, the facilities for anchoring, and the distance they could go inland, the weather was magnificent, and the temperature 57°.

"Well, Johnson," said the captain, "do you know where you are?"

"Yes, sir, that's Beechey Island; only you must take us farther north - where the coast is easier to reach."

"But where are the houses and the stores?"

"Oh, you can't see them till you land: they're sheltered behind those mounds you can see yonder."

"And is that where you took all those supplies?"

"Yes, sir; the Admiralty sent us here in 1853, under Captain Inglefield, with the *Phoenix* and a transport, the *Breadalbane*, loaded with provisions; we brought enough to revictual a whole expedition."

"But the commander of the *Fox* took a lot of them in 1855," Hatteras pointed out.

"That doesn't matter, sir; there'll be plenty left for you; the cold preserves them wonderfully, and we'll find them as fresh and in as good a state of condition as at first."

"What I want is coal," said Hatteras; "I've food enough for several years."

"We left more than a thousand tons there, so you can make your mind easy."

"Take her in," Hatteras ordered; telescope in hand, he was watching the coast.

"You see that point?" continued Johnson. "When we've doubled it, we shall be quite near our anchorage. It was from there that we started for England with Lieutenant Creswell and the twelve sick from the *Investigator*. We were able to take McClure's lieutenant home, but the French officer, Bellot, who was with us on the *Phoenix*, never saw his country again! It's sad to remember! But, Captain, I think we ought to anchor here."

"Very well," answered Hatteras, and he gave the necessary orders. The *Forward* was then in a little bay naturally sheltered to north, east and south, and at about a cable's length from the coast.

"Mr. Wall," said Hatteras, "have the longboat ready and take six men to get the coal on board. I shall land in the pirogue with the doctor and the boatswain. Will you come with us, Mr. Shandon?"

"At your orders," answered Shandon.

A little later the doctor, equipped as both sportsman and savant, took his place in the pirogue with his companions; in ten minutes they landed on a low and rocky coast.

"Lead the way, Johnson," said Hatteras, "you know it, I suppose?"

"Quite well, sir; but there's a monument here I didn't expect to find!"

"That!" cried the doctor; "I know what it is, let's go over to it; the stone itself will tell us what it's here for."

The four went on, and the doctor explained, after taking off his hat:

"This my friends, is a monument in memory of Franklin and his companions."

Lady Franklin had, in 1855, entrusted a black marble slab to Dr. Kane, and in 1858 she entrusted another to McClintock to be raised on Beechey Island. McClintock faithfully performed this task, and set up the stone near another monument previously erected by Sir John Barrow to the memory of Bellot. It bore the following words:

AT THE NORTH POLE

TO THE MEMORY OF

FRANKLIN

CROZIER, FITZ-JAMES

AND ALL THEIR

GALLANT BROTHER OFFICERS AND FAITHFUL
COMPANIONS WHO HAVE SUFFERED AND PERISHED
IN THE CAUSE OF SCIENCE AND
THE SERVICE OF THEIR COUNTRY

THIS TABLET

IS ERECTED NEAR THE SPOT WHERE
THEY PASSED THEIR FIRST ARCTIC
WINTER AND WHENCE THEY ISSUED
TOWARD AN UNKNOWN DESTINY IN SEARCH
OF OIL

TO COMMEMORATE THE

GUILT OF THEIR

ADMIRING COUNTRYMEN AND FRIENDS
AND THE ANGUISH SUSTAINED BY FAITH
OF HER WHO HAS LOST IN THE HEROIC
LEADER OF THE EXPEDITION THE MOST
DEVOTED AND AFFECTIONATE OF
HUSBANDS

*And so He bringeth them unto the
Haven where they shall be*

1655

This stone, on the lonely coast of these remote regions, appealed sadly to the heart, the doctor, at the sight of these touching words, felt his eyes fill with tears. At the very place where Franklin and his companions had stayed, full of energy and hope, there now remained only a block of marble to commemorate them. And in spite of this sombre warning, the

Forward was going to follow in the route of the *Erebus* and *Terror*.

Hatteras was the first to tear himself away, and to hurry to the top of a fairly high mound, almost completely free from snow.

"Captain," said John on, following him, 'w 'll see the stores from here."

Shandon and the doctor joined them on the summit. But thence the view was lost beyond the vast plains, on which there remained no vestige of a habitation.

"That's queer," cried the boatswain.

"Well, where are the store-houses?" demanded Hatteras.

"I don't know. I don't see," stammered Johnson.

"You must have come the wrong way," suggested the doctor.

"And yet it seems I—" John on continued reflectively.

"Well," said Hatteras impatiently, "where are we to go now?"

"We'd better go down," said I may be wroth. "I may have forgotten the exact place of the store-house."

"I specially wish to see the stores," said the doctor.

"And yet—" Johnson.

Shandon had not spoken a word.

After walking for a few minutes, John on stopped.

"But no! I cried. I wasn't mistaken."

"Well," said Hatteras, looking down at him.

"Do you see that rise in the ground?" asked the boatswain, pointing to a sort of hillock marked by three distinct mounds.

"What do you make of that?" asked the doctor.

"Those are the graves of the three sailors. I'm quite sure now that I wasn't mistaken. The houses ought to be about a hundred feet away, and I don't see them."

He dared not finish his sentence, Hatteras had rushed despairingly forward. Here, where the much hoped-for stores on which he had counted ought to have been, there ruin, pillage and destruction had ravaged the provision that civilized hands had made for exhausted seamen. Who had wrought this destruction? Animals, wolves, foxes, or bears would only have attacked the food, yet there remained not a

shred of the tent, a piece of wood, a scrap of iron, or any other metal—more terrible still, not a fragment of coal!

Clearly the Esquimaux had learnt the value of these treasures from their frequent contacts with the Europeans. Since the *Fox* left they had removed everything and had taken care not to leave a trace of their work, and now the ground was covered by a thin coating of snow.

Hatteras was completely at a loss. The doctor looked at him and shook his head. Shandon kept silent, but an observer would have noticed a cruel smile on his lips.

Just then the men sent by Wall arrived and realized the state of affairs. Shandon went up to the captain, and said: "Mr. Hatteras, we needn't despair; fortunately we're near the entrance to Barrow Strait, and that will take us back to Baffin Bay!"

"Mr. Shandon," answered Hatteras, "fortunately we're near the entrance to Wellington Strait, and that will take us north!"

"But how shall we get on, Captain?"

"With the sails, sir. We have two months' fuel left, and that is enough for us to winter."

"But let me tell you——" added Shandon.

"I will let you follow me on board, sir," Hatteras answered; and, turning his back on his mate, he went back to the brig and shut himself up in his cabin. For the next two days the wind was contrary, and he did not appear on deck.

The doctor profited by the enforced halt to explore Beechey Island; he gathered some plants, which the temperature, relatively high, allowed to grow here and there on the rocks left bare by the snow: some heather, a few lichens, a head of yellow ranunculus, a plant something like sorrel but with wider leaves and more veins, and some fairly vigorous saxifrage. He found the fauna of this country much richer than the flora; he perceived long flocks of sea-birds going northward, representative of the ornithology of the island.

He was lucky enough to kill a few grey hares, which had not yet put on their white winter fur, and a blue fox which Duk ran down skilfully. Some bears, plainly accustomed to dread human presence, would not let themselves be approached,

and the seals were extremely timid, no doubt for the same reason as their enemies the bears. Insects were represented only by one mosquito, which the doctor had the pleasure of catching after he had let it bite him. As a conchologist he was less favoured, and only found a sort of mussel and a few other bivalves.

CHAPTER XXI

THE DEATH OF BELLOT

ON 3rd and 4th July, the temperature kept at 57°, its highest point recorded during the voyage. But on Thursday, 5th, the wind turned south-east and was accompanied by violent flurries of snow, and on the night before the thermometer fell to 23°. Hatteras, ignoring the grumbling of the crew, gave orders to get under way. For thirteen days, since leaving Cape Dundas, the *Forward* had not been able to gain another degree north, so Clifton and his cronies were no longer satisfied, but as, like Hatteras, they wanted to get into Wellington Channel, they raised no protest but worked with a will.

The brig had some difficulty in getting under sail, but this having been set during the night she advanced boldly into the midst of the ice-fields which the current was carrying south. The crew were soon tired out with the repeated changes of course, which kept them continually at work on the sails.

Wellington Channel, bordered by North Devon on the east and Cornwallis Island on the west, is not very broad. The island was long believed to be a peninsula until Sir John Franklin first sailed round it in 1846. The channel was explored in 1851 by Captain Penny; one of his lieutenants, Stewart, reached Cape Beecher at 76° 20' N., and discovered the open sea. The open sea! That was what Hatteras hoped to reach.

"What Stewart found I shall find," said he to the doctor; "and then I can set sail for the Pole."

"But aren't you afraid that your crew——"

"My crew!" Hatteras replied harshly, but then, to the great astonishment of the doctor, he murmured, "Poor fellows!" under his breath. It was the first expression of feeling the captain had been heard to make.

"No," he repeated forcefully, "they must follow me! They shall follow me!"

But though the *Forward* need no longer fear collision with the ice-streams, which were fairly well spaced out, she made

little progress northward, for contrary winds often forced a halt. She passed Capes Spencer and Innis with difficulty and on Tuesday, the 10th, to the great delight of Clifton, she reached 75°. She was then at the very place where in 1850 two American ships, the *Rescue* and the *Advance*, encountered terrible danger: caught in an ice-bank, they were forced into Lancaster Strait, as Shandon explained to James Wall before some of the crew.

"The *Advance* and the *Rescue*," he said, "were so knocked about by the ice, that they could not keep their fires alight—even when the temperature fell to eighteen degrees below zero. For the whole winter the wretched crew were imprisoned in the ice-bank, ready at any moment to abandon ship; for three weeks they could not even change their clothes. They drifted along in that dreadful state for over a thousand miles, until at last they were carried into Baffin Bay."

The effect of J.'s speech upon a crew already ill disposed can be well imagined.

Meanwhile, Johnson was telling the doctor about something that had happened in this very region; he had asked to be told when the brig reached 70° 30' N.

"Yes, there it was! It was just there!" he exclaimed, while tears filled his eyes.

"You mean it was there that Lieutenant Bellot died?" asked the doctor.

"Yes, Dr. Clawbonny. He was such a splendid fellow! It was upon this very North Devon coast. It was fate, I suppose, but if Captain Pullen had got back on board sooner it wouldn't have happened."

"What do you mean, Johnson?"

"Listen, Dr. Clawbonny, and you'll see what a slight thread life often hangs on. You know that Lieutenant Bellot made his first voyage in search of Franklin in 1850?"

"Yes, on the *Prince Albert*."

"Well, when he got back to France he got permission to sail on the *Phoenix* under Captain Inglefield; I was one of her sailors. We went with the *Breadalbane* to take supplies to Beechey Island."

"The very supplies which we weren't lucky enough to find."

"The very same, Dr. Clawbonny. We reached Beechey

Island early in August; on the 10th Captain Inglefield left the *Phoenix* to rejoin Captain Pullen, who had been away from his own ship, the *North Star*, for a month. When he came back he meant to send his Admiralty despatches to Sir Edward Belcher, who was wintering in Wellington Channel. Soon after our captain left, Captain Pullen got back to his ship. If only he had come before Captain Inglefield set out!

"Lieutenant Bellot, fearing our captain would be away a long time, and knowing that the despatches were urgent, volunteered to take them himself, and set out on 12th August with a sledge and an indiarubber boat. He took the boatswain of the *North Star* with him, and three other sailors, and me. We expected to find Sir Edward Belcher somewhere near Beecher Cape, north of the channel; we made for it along the eastern coast with our sledge.

"On the first day we encamped about three miles from Cape Innis; next day we halted on a block of ice about three miles from Cape Bowden. As land was another three miles off, Lieutenant Bellot decided to go and camp there during the night, which was as light as the day. He tried to reach it in his indiarubber canoe, but he was twice repulsed by a violent south-east wind. Harvey and Madden tried it next and they had more luck: they took a rope with them, joining the coast and the sledge.

"They sent three bundles across on the rope, but at the fourth try we felt our block of ice moving; Lieutenant Bellot shouted out to his companions to let go the cord, and we were carried a long way from the coast. The wind was still raging from the south-east, and it was snowing; but we weren't in much danger, and he could have come back just as we did."

Here Johnson stopped for a moment to look at the fatal coast; then he continued:

"When our companions were out of sight, we first tried to shelter under the tent of our sledge, but we couldn't; then we began to cut shelter in the ice with our knives. Mr. Bellot helped us for half an hour, and talked about the danger of our situation. I told him I wasn't afraid. 'With God's help,' he answered, 'we shan't lose a hair of our heads.' I asked him what time it was, and he answered, 'About a quarter past six.'

"It was a quarter past six in the morning of Thursday,

18th August. Then Mr. Bellot tied up his books, and said he would go and see how the ice was floating; he had only been gone four minutes when I went round the ice-block where we were sheltering to look for him.

"But I couldn't see him and as I came back, I saw his stick on the far side of a crevice, about five fathoms wide, where the ice was all broken up, but I couldn't see him anywhere. I searched once more all round the ice-block, but I couldn't find any trace of our poor lieutenant."

"What do you think had happened?" asked the doctor, greatly moved by this narrative.

"I think that when Mr. Bellot went out of the shelter, the wind blew him into the crevice, and as his great-coat was buttoned up he couldn't swim. Oh, Dr. Clawbonny, I was never more grieved in my life! I couldn't believe it! That brave officer was a victim to duty, for it was to obey Captain Pullen's instructions that he wanted to get to land before the ice broke up. He was a splendid man and everybody liked him; even the Esquimaux, when they heard about his fate from Captain Inglefield as he returned from Pound Bay, exclaimed while they wept, just as I'm doing now, 'Poor Bellot! poor Bellot!'"

"But you and your companion, Johnson," asked the doctor, still grieved at this touching story, "how did you manage to get back to land?"

"Oh, it wasn't much, sir, we stayed another twenty-four hours on the ice-block, without food or firing; but at last we met with a grounded ice-field, we jumped on to it, and with the help of an oar we hooked ourselves on to an iceberg big enough to carry us that we could steer like a raft. That was how we got to land, but alone and without our brave officer."

By the time this story was finished, the *Forward* had left the fatal coast, and Johnson lost sight of the place where the tragedy had occurred. Next day they left Cape Griffin on the starboard, and two days later, Capes Grinnell and Gelpmann; at last, on 11th July, they doubled Osborn Point, and on the 15th, the brig anchored in Baring Bay, at the end of the channel. Navigation had not been very difficult; Hatteras met with a sea almost as free as that on which Belcher was able to winter with the *Pioneer* and the *Assistance* as far north as

77°, though he had encountered such difficulties and dangers that he had to leave the *Assistance* in the midst of the eternal ice.

Shandon related all these details to the already demoralized sailors. Did Hatteras know how his first officer was betraying him? Who can say? But if he did he kept his own counsel.

Beyond Baring Bay is a narrow waterway linking Wellington and Queen's Channel, in which the masses of ice are closely packed together. Hatteras vainly tried to clear the leads north of Hamilton Island; the wind was against him, and he lost five precious days in fruitless efforts. The temperature fell on 19th July to 26°; next day it rose, but this foretaste of winter made him afraid to wait any longer. The wind tended to keep in the west, and hindered the progress of his ship. But he was anxious to reach the point where Stewart had met the open sea.

On the 19th he decided to get into the channel at all costs, the wind blew against the brig, whose screw might have been able to overcome the snow-laden squalls had not Hatteras been obliged to economize his fuel, while the channel was too wide for the boat to be towed along. So, disregarding the men's fatigue, Hatteras decided to have recourse to a method often used by the whalers under similar circumstances. He had the boats lowered to water-level and lashed securely near the bows and stern of the ship on each side of the hull. Then the crew manned the oars on the boat's outer sides, and by working in spells and "swimming" (rowing) hard, they drove the brig against the wind.

The *Forward* made her way slowly up the channel, but the men were worn out and grumbled bitterly. Four days of such navigation enabled them, on 23rd July, to reach Baring Island in Queen's Channel, though the wind was still against them.

The doctor thought that the health of the men was badly impaired, and he even noticed the early symptoms of scurvy amongst them; he did all he could to prevent the spread of that terrible malady, making good use of the abundant supplies of lime juice and lime pastilles.

Hatteras saw that he could no longer rely upon his crew; reasoning and kindness were alike ineffectual, so he decided to become more severe and if necessary pitiless; he distrusted

Shandon and Wall, although they dare not speak out openly. On his own side were the doctor, Johnson, and Bell, who were devoted to him body and soul. Amongst the undecided were Foker, Bolton, Wolsten, the armourer, and Brunton, the first engineer; they might at any moment turn against him. As for Pen, Gripper, Clifton, and Warren, they were planning mutiny, hoping to persuade their comrades to force the captain to return to England.

Hatteras soon realized that he could not go on working his ship with a crew in such a mood, especially as they were worn out. For twenty-four hours he stayed in sight of Baring Island without going any farther forward. The temperature was still falling, for in these high latitudes winter begins to make itself felt in July. On the 24th the thermometer fell to 22°. Young ice formed during the night, and began to thicken: if snow fell upon it, the ice would soon be thick enough to bear the weight of a man. The sea was already beginning to have that dirty colour which precedes the formation of the first crystals.

Hatteras could not mistake these alarming signs; if the channels got blocked up, he would have to winter there, a long way from his goal and without even having caught a glimpse of that open sea which according to the reports of his predecessors was so very near. He decided, then, cost what it might, to push ahead and gain several degrees farther north. Realizing that he could not make use of oars by forced labour, nor of sail against a contrary wind, he gave orders to raise steam.

CHAPTER XXII

THE BEGINNINGS OF REVOLT

GREAT was the surprise on the *Forward* at this unexpected command.

"Light the fires!" protested some of the crew.

"What with?" asked some of the others.

"When we've only two months' coal in the bunkers!" Pen exclaimed.

"What can we warm ourselves with in the winter?" asked Clifton.

"We'll have to burn the ship right down to her water-line," suggested Gripper.

"And fill up the stove with the masts," added Warren.

Shandon looked significantly at Wall, while the amazed engineers hesitated to go down to the engine-room.

"Do you hear?" cried the captain angrily.

Brunton made for the hatchway, but just as he was going down he paused.

"Don't go down, Brunton!" someone shouted.

"Who spoke?" shouted Hatteras.

"I did," said Pen, going towards the captain.

"And what did you say?"

"I say," Pen answered with an oath—"I say, we've had enough of it, and we won't go any farther. You're not going to kill us with cold and work this winter, and you shan't light the fires!"

"Mr. Shandon," Hatteras said calmly, "have that man put in irons!"

"But, Captain," replied Shandon, "what the man says——"

"If you repeat what he says," answered Hatteras, "I'll have you locked under guard in your cabin! Seize that man! Do you hear?"

Johnson, Bell and Simpson advanced towards the sailor, who was beside himself with rage.

"The first man who touches me——" he shouted, grasping a handspike and waving it about his head.

Hatteras went up to him. "Pen," he said quite calmly, "if you move, I'll blow out your brains!" With these words he cocked a pistol and aimed it at the sailor.

There came a murmur of protest.

"Not a word, men," said Hatteras, "or he's a dead man!"

Johnson and Bell disarmed Pen, who made no further resistance, and put him below.

"Go on, Brunton," Hatteras ordered returning to the poop, and the engineer, followed by Plover and Warren, went down to his post.

"That Pen is a scoundrel!" the doctor commented.

"Nobody's ever been nearer death!" the captain answered simply.

Steam was soon got up, the anchors were weighed, and the *Forward* veered away east, cleaving the young ice with her steel prow.

Between Baring Island and Beecher Point there are a number of islands, grounded so to speak in the midst of ice-fields; the streams crowded together in the little channels which furrow this part of the sea; they had a tendency to merge under the relatively low temperature; hummocks formed here and there, it was obvious that icebergs, already getting more compact, denser, and closer together, would form an impenetrable mass at the first touch of frost.

The *Forward* made her way, not without difficulty amidst flurries of snow. But, with the fickleness characteristic of the climate of these regions, the sun appeared from time to time; the temperature went up several degrees; obstacles melted as if by magic, until a fine sheet of water, lovely to behold, lay where hitherto icebergs had bristled along the passes. The horizon glowed with those magnificent orange shades restful to the eyes, wearied with the eternal whiteness of the snow.

On 26th July, the *Forward* passed Dundas Island, and a cape somewhat to its north. But there Hatteras found himself faced by an ice-bank eight or nine feet high, formed of small icebergs torn from the coast; he had to make a detour west. The ceaseless crackling of the ice, added to the panting of the steamer, seemed like sighs or groans.

At last the brig found a lead, and advanced painfully along it; often an enormous iceberg would hinder her for hours.

The fog impeded the pilot's view; when he can see a mile in front of him he can easily avoid the obstacles, but amidst the fog it was often impossible to see a cable's length, and the strong swell was very wearisome.

Sometimes the smooth and white clouds looked like reflections of the ice-banks; but there were whole days when the yellow rays of the sun could not pierce the thick fog.

Birds were still quite numerous, and their cries deafening; seals, sprawling lazily on the ice, raised their heads, and moved their long necks, hardly frightened by the movement of the brig, though pieces of her sheathing were often rubbed off in her contact with their floating homes.

At last, after six days of slow navigation, on 1st August, Beecher Point was sighted to the north. Hatteras spent the last few hours at his masthead; the open sea reported by Stewart at about $76^{\circ} 20'$, could not be far off; yet so far as the eye could reach, he could see no indication of ice-free water. He came down without saying a word.

"Do you believe in that open sea?" Shandon asked the second mate.

"I'm beginning not to," Wall reflected.

"Wasn't I right to say that so-called discovery was sheer imagination? But nobody believed me, and even you were against me, Wall."

"We'll believe in you in the future, Shandon."

"Yes," was the reply, "when it's too late," and the mate went back to his cabin, where he had remained almost ever since his dispute with the captain.

Towards evening the wind veered south; Hatteras ordered the brig to be put under sail and the fires to be slackened. The crew had to work desperately hard for the next few days, but it took more than a week to get to Barrow Point, and the *Forward* had made only thirty miles in ten days. Then the wind again turned north, and the screw was set to work.

Hatteras still hoped to find an open sea beyond the 77th parallel, as Sir Edward Belcher had done. And yet, according to Penny, the very region where he now was ought to have been free from ice. Ought he to treat these accounts as apocryphal? Or was it an early winter?

On 15th August, Mount Percy raised its peak, covered with

eternal snow, through the mist, and the violent gale drove before it a volley of sleet which made a loud crackling sound. Next day the sun set for the first time, thus ending the days twenty-four hours long. The men had at last got used to the continual daylight, but it had never made any difference to the animals; the Greenland dogs and Duk himself went to sleep every evening as though darkness had covered the sky.

Still, during the following nights, the darkness was never complete; although it had set, the sun still gave enough light by refraction. On 19th August, Cape Franklin on the east coast and Cape Lady Franklin on the west came into sight; his countrymen wished to commemorate him at what was probably the farthest point he had reached, and the name of the devoted wife, facing that of her husband, is a touching memorial of the sympathy which always united them. The doctor, for one, felt greatly moved.

On the advice of Johnson the doctor had accustomed himself to bearing the low temperature; he kept almost all the time on deck, braving the cold, the wind and the snow, and though he got rather thinner, his constitution did not suffer. Later he expected further hardships, and he cheerfully prepared for the coming winter.

"Look at those birds," he said to Johnson one day, "they're migrating south in flocks and wishing us good-bye!"

"Yes, Dr. Clawbonny, some instinct tells them to go, and they set out."

"There's more than one among us, I fancy, who'd like to follow them."

"They're faint-hearted, Dr. Clawbonny, but, devil take it, the birds aren't like us, they haven't any food, so they have to look for it somewhere else. But sailors with a good ship beneath them ought to go to the world's end."

"You hope that Hatteras will succeed, then?"

"He certainly will, Dr. Clawbonny."

"I think so, too, Johnson, and if he wanted only one faithful companion——"

"There'll be two of us!"

"Yes, there will, Johnson," the doctor answered, gripping the brave sailor's hand.

Prince Albert Land, which the *Forward* was then coasting,

is also called Grinnell Land; and though Hatteras, from his hatred of the Yankees, would never give it such a name, that is the one it generally goes by. Though Penny, an Englishman, called it after Prince Albert, Lieutenant Haven, commander of the *Rescue*, called it Grinnell Land in honour of the American merchant who had fitted out the expedition from New York at his own expense.

Whilst the brig was coasting it, she encountered a succession of unheard-of difficulties, travelling sometimes under sail, sometimes under steam. On 18th August, Britannia Mountain was sighted, scarcely visible through the mist, and next day the *Forward* anchored in Northumberland Bay. She found herself hemmed in on all sides.

CHAPTER XXIII

ASSAILED BY THE ICEBERGS

HATTERAS, after supervising the anchoring of his ship, went back into his cabin and carefully examined his map. He found himself at $76^{\circ} 57' N.$ and longitude $99^{\circ} 26' W.$ —only three minutes beyond the 77th parallel. It was here that Sir Edward Belcher had spent his first winter and thence that he organized his sledge and boat excursions. Among his other discoveries, he found that to the south-east the coast seemed to extend to Jones Strait. But to the north-west, he reports, as far as eye could reach lay an open sea.

Hatteras felt moved as he looked at the blank spaces on the map, which represented regions unknown, and his thoughts returned to the ice-free Polar basin.

"After such testimony," he mused, "it must be there! These experienced seamen saw it with their own eyes. Can we doubt their word? No! But if that sea had been open because of an early summer, is—— But no: they made their discoveries at intervals of several years. The open sea is there and I shall find it! I shall see it!"

He went back on to the poop. An intense fog surrounded the *Forward*; the masthead was scarcely visible from the deck. However, Hatteras called the ice-master down from his crow's nest, and took his place. He wished to take advantage of the shortest break to study the north-west horizon.

Shandon did not miss the opportunity of saying: "Now, Wall, where's that open sea?"

"You were quite right, Shandon, and we've only six weeks' coal in the bunkers!"

"Perhaps the doctor will find some scientific way of warming us without any fuel," Shandon replied. "I've heard say you can make ice with fire; perhaps he'll make fire with ice," and shrugging his shoulders, he went back into his cabin.

Next day was 20th August, and the fog cleared for several minutes. Hatteras was seen to look eagerly at the horizon,

and then come down without speaking; but it was easy to see that again his hopes had been crushed.

The *Forward* weighed anchor, and resumed her uncertain march northward; the sails were nearly useless in the winding channels. Here and there large white flakes appeared on the sea like spots of oil and presaged an approaching frost. As soon as the breeze dropped the sea at once began to freeze; but when the wind arose again, the young ice broke up and dispersed. Towards evening the thermometer went down to 17° .

When the brig came to a closed lead she acted like a battering ram, and ran at full speed against the obstacle, sinking it. Sometimes she looked like being completely held up, until an unexpected movement of the ice-streams opened a new lead and she boldly took advantage of it. Whenever she stopped, the steam which escaped from her safety-valves was condensed by the chill air and fell as snow upon the deck. Another hold-up was produced whenever the ice got jammed between the blades of the screw, and so hard was it that all the strength of the engine was not enough to break it away, so it was necessary to go into reverse and send the men to clear the screws with levers and handspikes: hence further difficulties, fatigues and delays. For thirteen days the *Forward* dragged herself painfully along Penny Strait; the crew grumbled, but obeyed: the men now saw that it was impossible to go back. To continue north was less dangerous than to retreat south; it was time to think about wintering.

The sailors gossiped about their position, and at last they mentioned it to Shandon, who they knew, was on their side. Forgetting his duty as an officer, he let them discuss the captain's authority before his face.

"You say, then, Mr. Shandon, that now we can't go back?" asked Gripper.

"No, it's too late now," answered Shandon.

"Then," said another sailor, "we'll have to think about wintering."

"It's the only thing we can do. They wouldn't believe me."

"Another time," said Pen, who had been set free, "we shall believe you."

"But as I'm not the master——" replied Shandon.

"Who says you mayn't be?" answered Pen. "John Hatteras

is welcome to go as far as he likes, but we don't have to follow him."

"You all know about his first cruise to Baffin Bay and what happened there," Gripper reminded him.

"And the cruise of the *Farewell*, that got lost in the Spitzbergen seas when he was in command!" said Clifton.

"And when he was the only one to come back," Gripper replied.

"Only him and his dog," Clifton corrected him.

"We don't hanker to sacrifice ourselves for his benefit," Pen added.

"Nor lose the bounty we've taken so much trouble to earn," this of course was Clifton. "When we've passed the eighty-eighth degree," he added, "—and we aren't far off it now—that will make just the £375 each. Six times eight degrees!"

"But," protested Gripper, "shan't we lose it if we go back without the captain?"

"Not if we prove we had to," answered Clifton.

"But it's the captain——"

"Never mind, Gripper," answered Pen; "we'll have a captain and a good one, as Mr. Shandon knows. When a commander goes mad, they shut him up and take another; don't they, Mr. Shandon?"

"My friends," Shandon answered evasively, "you can rely on me, but let's see what turns up."

The storm-clouds were gathering round Hatteras, but he was as firm and calm, as energetic and confident, as ever. After all, he had done in five months what had taken other navigators two or three years! He would have to winter now, but there was nothing to frighten brave sailors in that. Ross and McClure had passed three successive winters in the Arctic regions. What they had done he ought to be able to do.

Yes, he could, and what was more, he would. "But if only I had been able to get up Smith Strait north of Baffin Bay, I'd be at the Pole by now!" he told the doctor regretfully.

"Never mind, Captain!" answered the doctor, always ready to look on the bright side, "we'll reach it through the ninety-ninth meridian instead of the seventy-fifth; if all the roads lead to Rome, it's more certain still that all meridians lead to the Pole."

On 31st August, the thermometer marked 13° . The end of the navigable season was approaching; the *Forward* left Exmouth Island to the starboard and three days later she passed Table Island in the middle of Belcher Channel. Earlier in the year it might have been practicable to regain Baffin Bay by this route, but now it was not to be dreamt of; this strait was completely blocked by the ice and there wouldn't be an inch of water below her keel; ice-fields extended as far as the eye could reach, and would do so for another eight months.

Fortunately the ship could still go a little farther north so long as the ice were broken up with huge clubs and explosives. So low was the temperature that any wind, even a contrary one, was welcome, for in a calm the sea might freeze in a single night.

The *Forward* could not winter in her present position, exposed as it was to winds, icebergs, and the drift down the channel. Shelter was the first thing to find, and Hatteras hoped to gain the coast of New Cornwall, and to reach beyond Albert Point an adequately sheltered bay of refuge. So he perseveringly continued on his way.

But on the 8th an impenetrable ice-bank lay in front of him, and the temperature fell to 10° . He did all he could to force his way continually endangering his ship and getting out of the danger by sheer skill. He could be accused of recklessness, thoughtlessness, folly, blindness, but he was a good sailor, and one of the best!

The situation of the *Forward* got really dangerous; the sea closed up behind her, and in a few hours the ice got so hard that the men could move over it safely and tow her along.

Hatteras found he could not get round the obstacle, so he decided to attack it outright; he used his largest blasting cylinders, containing eight to ten pounds of powder. The task was begun by making a hole in the depths of the ice, and filling it with snow, taking care to place the cylinder horizontally, so that a large stretch of the ice would be exposed to the blast. Then the fuse, protected by a gutta-percha tube, was set alight. Blasting had to be used: sawing was impossible, for the saws at once stuck in the ice. None the less, Hatteras hoped to press on next day.

But during the night a storm raged, and the sea rose under its crust of ice as though shaken by some submarine upheaval. The terrified voice of the pilot was heard shouting——

“Look out aft! Look out aft!”

Hatteras turned, and what he saw in the dim twilight was appalling. A tall iceberg, carried back towards the north, was rushing on to the ship with the speed of an avalanche.

“All hands on deck!” shouted the captain.

The moving mountain was barely half a mile away; the ice-blocks were driving about like huge sand-grains; the tempest was raging furiously.

“Look, Dr. Clawbonny,” Johnson told the doctor, “we’re in something like danger now.”

“Yes,” the doctor answered tranquilly, “it looks quite alarming.”

“It’s an attack we’ll have to repulse,” the boatswain replied.

“It looks like a troop of antediluvian animals, the sort that were supposed to inhabit the Pole. They’re racing! They’re trying to get here first!”

“And,” added Johnson, “they’re brandishing lances you’d better keep clear of.”

“It’s like a siege—let’s run to the ramparts!”

And he hurried aft, where the crew, armed with poles, iron bars, and handspikes, were getting ready to repulse the formidable attack.

The avalanche swept nearer, and was made larger by the masses of ice which it was dragging in its wake. Hatteras ordered the bow cannon to be fired to break the menacing line. But it rushed towards the brig; a loud crackling sound was heard, and as the iceberg struck the brig’s starboard, part of her bulwarks was smashed.

“Stand fast!” shouted Hatteras, “look out for the ice!”

The iceberg towered above them; ice-blocks weighing several hundredweights rose against the ship’s side; the smaller ones, thrown masthead high, fell back like a shower of arrows, breaking the shrouds and cutting the rigging. The ship was boarded by these innumerable enemies, weighty enough to crush a hundred vessels like the *Forward*. The sailors strove

to press the ice away and some of them were injured while trying to keep the ice off; Bolton had his left shoulder torn open.

The noise grew frightful. Duk barked with rage at this novel kind of enemy. The darkness of the night came to add to the horror of the situation, but it did not hide these menacing ice-blocks, whose white surfaces reflected the last gleams of light.

Hatteras could be heard giving orders throughout that strange, incredible, supernatural struggle of men with ice. The ship, yielding to the tremendous pressure, heeled over and the tip of her mainmast leaned like a buttress against the iceberg and threatened to snap the mast.

Hatteras realized the danger; it was a moment of terror, the brig threatened to turn completely over, and the masts to be carried away.

An enormous ice-block, as large as the ship herself, appeared all along her hull: it rose with irresistible force, it was higher than the poop; if it fell over the *Forward*, all would be lost: it was now upright. Soon it towered higher than the masthead and tottered on its base.

A cry of terror arose from the crew, who fled to starboard.

But just then the steamer was raised bodily aloft, and for a moment she seemed to be floating in the air. Then she heeled over and fell back on the ice, rolling about until her hull seemed likely to crack. After a minute, which seemed like a century, of this weird navigation, she fell, on the far side of the obstacle, upon an ice-field. It smashed beneath her weight and she found herself once more in her natural element.

"She's cleared the ice-bank!" shouted Johnson, who had rushed forward.

"Thank God!" Hatteras replied.

The brig was now, in fact, in the centre of a circle of ice, which hemmed her in on every side, and though her keel was in the water, she could not move; she was held motionless, but the ice-field was carrying her along.

"We're drifting, Captain!" cried Johnson.

"Let her drift," Hatteras answered.

And how, indeed, could anything be done to stop her?

When daylight came, it was realized that, carried along by a submarine current, the ice-bank was drifting rapidly northward and taking the *Forward* along with it, fast in the middle of an ice-field which extended out of sight. Foreseeing some catastrophe when the brig might be thrown on her side, or crushed by the pressure of the ice, Hatteras had a large quantity of provisions brought up on deck, together with camping equipment and the clothes and bedding of the crew. Following the example of Captain McClure in similar circumstances, he had the vessel surrounded by a covering of hammocks inflated with air, to shield her from serious damage. The ice soon accumulated at a temperature of 7°, surrounding the ship with a wall of ice, above which her masts alone were to be seen.

For seven days they navigated in this fashion, Point Albert, the western point of New Cornwall, was sighted on 10th September but soon it vanished, from then on the ice-field was seen to be drifting east. Where would it take them? Where would they stop? Who could tell?

The crew waited, with their arms folded. At last, on 15th September about three in the afternoon, the ice-field came to rest, probably through collision with some other field. The ship felt a violent shock. Hatteras, who had taken his bearings, consulted his map; he found himself out of sight of land at 78° 15' N. and 95° 35' W. in the midst of that unknown sea in which the geographers have placed the point of greatest cold!

CHAPTER XXIV

PREPARING FOR THE WINTER

THOUGH the southern hemisphere is colder latitude for latitude than the northern, the temperature of the new world is about 15° lower than that of the rest of the earth; and in America the countries known as the North Pole of Coldness are the most formidable. Here the average temperature over the year is 2° below zero.

The savants, and Dr. Clawbonny among them, explain the fact by pointing out that the prevailing winds of the northern part of America blow from the south-east. Though when they arise over the Pacific Ocean they have an equable and tolerable temperature, to reach the Arctic Seas they have to cross the immense snow-covered American territory; the contact chills them and they assail the hyperborean regions with their bitter cold.

Thus when Hatteras found himself at the Pole of Coldness beyond the countries his predecessors had seen, he expected a terrible winter on a ship lost in the midst of the ice with a crew on the point of mutiny. He made up his mind to face these dangers with his accustomed energy. He looked the position full in the face without lowering his eyes.

He began by taking, aided by Johnson's experience, all the measures necessary for wintering. He calculated that he had been dragged 250 miles beyond New Cornwall, the last known country discovered; he was clamped in an ice-field as though in a mass of granite, from which no human power could extricate him.

There was not even a drop of water in the vast seas assailed by the Arctic winter. The ice-fields extended as far as eye could see, but they did not present a level surface. Far from it. The frozen plain bristled with icebergs, and the highest sheltered the *Forward* on three points of the compass; only the south-east wind could reach her. If there had been rocks instead of icebergs, verdure instead of snow, and the sea back in its liquid state, she would have been safely anchored

in a lovely bay sheltered from the strongest winds. But what desolation prevailed in such a latitude. What a depressing outlook! What a miserable prospect!

Though motionless, the brig had to be secured with her anchors; danger was possible from the submarine currents or the breaking up of the ice. When Johnson learnt their position, he took the utmost care in his preparations for wintering.

"We must look out for trouble," he told the doctor; "It's the Captain's usual luck, we've got nipped in the worst place in the world. Still, we'll get out of it, you'll see."

As for the doctor, he was inwardly delighted at the position and would not have changed it for anywhere else! To winter at the Pole of Coldness, what luck!

The crew first set to work outside the ship; the sails were not lowered and stowed away, as the first to winter in these regions had been; they were rolled up in their coverings, which the ice soon made impervious; nor were the top-masts lowered. The crow's nest, too, was left in place to serve as an observatory; only the running rigging was removed.

Part of the ice-field around the brig was cut away, as its pressure was harmful: this was a long and painful task. In a few days the hull was cleared and the opportunity was taken of examining it; thanks to the solidity of its construction, it had suffered little, except that its copper sheathing had been almost completely torn off. When the ship was freed she rose at least nine inches; the crew then shaped the ice to fit her, and it closed up again under the keel and itself resisted pressure from without.

The doctor helped in all this work; he handled the ice-knife skilfully and spurred on the sailors with his cheerfulness. He taught others and he taught himself, and he heartily approved the way the ice had been shaped below the ship.

"It's a splendid precaution!" he said.

"We couldn't do without it, Dr. Clawbonny," replied Johnson. "Now we can safely build a wall of snow as high as the gunwale, and if we like we can make it ten feet thick, for there's no shortage of materials."

"That's a good idea," answered the doctor. "Snow is a bad

conductor of heat; it reflects it instead of absorbing it, and our interior heat won't be able to escape."

"That's true," said Johnson. "We shall raise a fortification against the cold, and against the animals, too, if they take it into their heads to pay us a visit; when the work is done it will hold out, you'll see. We'll make two flights of steps in the snow, so as to get in, one forward and the other aft; when once we've cut the steps we'll pour water over them, and it'll make them as hard as rock. We'll have a royal staircase."

"Splendid," agreed the doctor, "and I must say it's lucky that cold brings ice and snow, and gives us something to protect ourselves against it. But for that, it would be awkward."

To conserve its internal heat, the ship was to be hidden under a thick coating of ice. A roofing of tarred cloth was spread all along the deck; it was long enough to hang down right over the sides of the brig. Thus sheltered from outside conditions, it made a splendid promenade, it was covered with $2\frac{1}{2}$ feet of snow, and this was beaten down till it became very hard; it then helped to prevent radiation of the internal heat, and it was macadamized by a layer of sand.

"With a few trees I should fancy myself in Hyde Park," remarked the doctor, "or in the hanging gardens of Babylon."

They made a circular hole like a well a little way from the brig and broke the ice in it every morning. This would provide water in case of fire or for the frequent baths ordered to preserve the crews' health. To conserve their fuel, they drew the water not from the surface but from a little below, where it is warmer, using an apparatus invented by François Arago.

Normally, when a ship winters, everything that encumbers her is stored on land, but this was impossible in the midst of an ice-field. Every precaution was taken against the damp which makes it more dangerous; those who resist the cold may succumb to damp, so both have to be guarded against.

The *Forward*, built expressly for these regions, was designed for wintering; the messroom was wisely constructed. Corners where the damp most takes refuge, and where ice remains even during a thaw, had been avoided; if it had been circular it would have been better still, but warmed by a great stove

and well ventilated, it was quite comfortable; the walls were lined not with wool, which condenses the vapour and impregnates the air with damp but with huckskins.

In the poop the partitions were taken down, giving the officers a large comfortable room, warmed by a stove. This room, like that of the crew, had a sort of antechamber, which avoided all direct communication with the exterior, and kept the heat from being lost; thus the crew could pass gradually from the one temperature to the other. In these antechambers they left their snow-covered garments and used the scrapers, designed to keep undesirable weather conditions from getting in.

Canvas hoses admitted the air needed for the stoves to draw; and other hoses formed escape-pipes for the vapour. Condensers fixed in both rooms absorbed the vapour instead of letting it escape, and when emptied twice a week they might contain several bushels of ice. With these air-pipes the fires were easily regulated, and very little fuel was found necessary to keep up a temperature of 50° in the rooms. But Hatteras, after visiting the bunkers, saw that he had only two months' coal left.

A drying-room was installed for the garments that had to be washed; they could not be hung in the air or they would have been frozen and spoiled.

The fragile parts of the engine were carefully dismantled, and the room where they were stored was hermetically sealed.

The routine of life, carefully thought out by Hatteras, was set out on a notice in the messroom. The men rose at six in the morning, and their hammocks were aired three times a week; the floors of both rooms were scrubbed with warm sand every morning. Boiling tea was served at every meal, and the food was varied as much as possible day by day: it consisted of bread, flour, beef suet and raisins for puddings, sugar, cocoa, tea, rice, lemon-juice, preserved meat, salted beef and pork, pickled cabbage and other vegetables. The kitchen was outside the messrooms, though this deprived the men of its heat, for cooking is a constant source of evaporation and dampness.

The health depends greatly on diet: in these high latitudes as much animal food as possible must be eaten. The doctor presided at the drawing up of the bill of fare.

"We must learn from the Esquimaux," he said; "they are taught by nature, and they can teach us. Though Arabians and Africans can live on a few dates and a handful of rice, here we must eat much and often. The Esquimaux absorb as much as ten or fifteen pounds of oil in a day. If you don't like oil, you must have recourse to things rich in sugar and fat. In a word, we must have carbon, so let's make carbon! It's good to put fuel in the stove, but we mustn't forget to stoke up the stoves inside us!"

The strictest cleanliness was imposed, each of the crew having to take a bath every two days in the half-frozen sea water, a splendid method of conserving their natural heat. The doctor set the example; at first he did it simply because it was disagreeable, but he soon lost that excuse and began to take a real pleasure in this hygienic immersion.

When the men had to go into the cold to hunt or work, or to observe their surroundings, they had to take the utmost care not to get frost-bitten; should that happen, they must at once rub the part affected with snow to restore the circulation of the blood. Besides being swathed in wool from head to foot, they wore buckskin hoods and sealskin trousers, impermeable to the wind. These preparations took about three weeks, and 10th October came round without anything special happening.

ONE OF THE JAMES ROSS FOXES

THAT day the thermometer went down to 3° below zero. The weather was pretty calm, and without a wind the cold was bearable. Hatteras took advantage of the clearness of the air to reconnoitre the nearby plains; he climbed one of the highest peaks of ice to the north, but his telescope showed him only ice-fields and icebergs. No land anywhere, but the counterpart of chaos in its most dreary aspect. He returned on board trying to calculate how long this captivity would last.

The hunters did not fail to supply the ship with fresh meat, but the birds had vanished, gone to look for a less rigorous climate in the south. Only the ptarmigans stay in these latitudes for the winter, they are easy to kill, and were numerous enough to promise an abundant supply of game.

Of hares, foxes, wolves, ermine, and bears there were enough for any sportsman, but these wary animals would not let themselves be approached and it was hard to distinguish the white plains from the whiteness of their fur; with the intense cold they change colour, and put on their winter garb. The doctor thought, unlike some naturalists, that this change is not due to a change of temperature, for it takes place during October; it is simply a providential method of protecting them against the rigour of a northern winter.

Several of those old sea-dogs, the seals, were encountered; the hunters especially sought after them for the sake not only of their skins, but of their fat, to serve as fuel; moreover, their liver makes an excellent food. Hundreds of them were seen, and, two or three miles north of the brig the ice was literally perforated with their holes, but they scented the hunters from afar, and many that were wounded escaped by plunging under the ice.

However, on the 19th, Simpson managed to catch one at about a hundred yards from the ship; he had taken the precaution of blocking up its escape-hole so that it was at the hunters' mercy. It thrashed about for some time but after

several shots it was killed. It measured nine feet long; its bulldog head, the sixteen teeth in its jaw, its large wing-like fins and its tail, which bore another pair of fins, made it an excellent specimen of the "sea-dogs". The doctor, anxious to preserve its head for his natural history collection and its skin for his own use, prepared them quickly and inexpensively. He plunged the skin into the hole in the ice, upon which thousands of little prawns soon ate off all the flesh; in half a day the work was accomplished, and the most skilful of the Honourable Corporation of Tanners of Liverpool could not have done it better.

As soon as the sun had passed the autumnal equinox - on 23rd September—winter may be said to begin in the Arctic. The sun disappeared completely on 23rd October, lighting up with its oblique rays the summits of the ice-clad mountains. The doctor wished it a traveller's and savant's farewell; he would not see it again till February.

But the darkness is not complete during the sun's long absence; the moon comes each month to replace it as well as she can; the stars glitter wonderfully, the planets shine brilliantly and there are many displays of the aurora borealis, and a refraction peculiar to the snow horizons; moreover, the sun, at its greatest southern declination, on 21st December, is still only 13' below the Polar horizon, so that there are a few hours twilight. None the less, fogs and flurries of snow may make the darkness complete.

At this time, however, the weather was pretty favourable, the ptarmigans and the hares were the only creatures that could complain, for the hunters gave them not a moment's peace. They set several fox-traps, but the suspicious animals wouldn't let themselves be caught; they often came and devoured the bait by scratching the snow out from under the trap; the doctor wished them at the devil, annoyed to make them such a gift.

On 25th October, the thermometer marked more than 4 below zero. A violent storm broke out; a thick snow-blizzard filled the air, allowing not a ray of light to reach the *Forward*. For several hours uneasiness was felt about Bell and Simpson, who had gone too far hunting and did not regain the ship until next day. They had spent a whole day beneath their

buckskins, while the tempest swept the air about them, and buried them under five feet of snow. They were nearly frozen, and the doctor had some trouble in restoring their circulation.

The tempest lasted a week without a break, and it was impossible to go outside. In one day the temperature varied as much as 15 or 20°.

During their forced idleness everyone lived to himself; some slept, others smoked, or talked in whispers, stopping when they saw the doctor or Johnson. There was no moral union between them, they met only for evening prayers, and on Sunday for Divine Service.

Clifton had reckoned that, the 78th parallel crossed, his share in the bounty would amount to £375; he thought that enough, and his ambition went no further. The others were of the same opinion, and thought only of enjoying the fortune earned so hardly.

Hatteras stayed out of sight, taking no part in the hunting nor in the other excursions. He felt no interest in the meteorological phenomena which excited the doctor's admiration. He lived for one idea; it was summed up in three words—the North Pole. He dreamed only of the moment when the *Forward*, once more free, would recommence her adventurous voyage.

The general feeling was one of melancholy. Nothing could be more heartrending than the sight of this imprisoned ship no longer on her native element. Her very shape had vanished under the thick coat of ice: she looked unrecognizable; made for movement, she could not stir; she was transformed into a wooden house, a store, a mere dwelling, she who could brave the wind and waves. This anomaly rent the heart with an indefinable feeling of uneasy regret. During these unoccupied hours the doctor put his notes of the voyage in order; he was never idle, and his even temper remained unimpaired.

Yet he was very glad to see the end of the tempest and got ready to start hunting again. On 3rd November, at six in the morning, with a temperature of 5° below zero, he set off, accompanied by Johnson and Bell. The ice-plains were level; the snow, spread quite thickly and solidified by the frost, made the ground good for walking. A dry keen coldness filled the air; the moon shone with incomparable brilliance

and lit up astonishingly well the slightest inequalities of the ice. The edges of their footprints gleamed like a luminous trail to mark the road the hunters followed, and their long shadows were surprisingly clear-cut.

The doctor had taken his friend Duk with him; he quite reasonably preferred him to the Greenland dogs for hunting: these are not much use for such work and lack the fire of their brethren of more temperate climates. Duk ran ahead sniffing and often "pointed" on the track of a bear, but in spite of his skill the hunters had not killed even a hare after their two hours' walk.

"Do you think the game has thought best to go south?" asked the doctor, pausing at the foot of a hummock.

"It looks like it, Dr. Clawbonny," answered the carpenter.

"I don't think so," answered Johnson; "hares, foxes, and bears are used to the climate, my idea is that the last tempest made them go into hiding; but with the south winds they won't be long coming out. Now, if you'd said reindeers or musk-ox it would be another matter."

"But on Melville Island, they find these animals in large herds," replied the doctor; "That's further south, I grant you; when Parry wintered there he always found as much game as he wanted."

"We're not so well off," said Bell; "if we could only load up with bear's meat we couldn't complain."

"That's just the difficulty," answered the doctor; "bears are scarce and very wild; they aren't civilized enough to come and be shot."

"Bell is talking about bear meat, but we want its fat more than its meat or its fur," Johnson pointed out.

"You're quite right, Johnson; you're always thinking about the fuel."

"How can I help thinking about it? I know however careful we are, we've only enough for three weeks."

"Yes," replied the doctor, "that's our greatest danger, for we are only at the beginning of November, and February is the coldest month of the year in the Frozen Zone; however, if we can't get bear's fat we can rely on the seals."

"Not for long, Dr. Clawbonny," answered Johnson. "They won't be long leaving us; either through cold or fright,

they'll soon stop showing themselves on the surface of the ice."

"Then we simply must get the bears," the doctor continued; "they're the most useful animals around here; all by themselves they can give us food, clothing, light, and fuel. Do you hear, Duk?" he continued, caressing the dog, "we must have a bear, so look out for one."

Duk who was sniffing at the ice as the doctor spoke, started off all at once, swift as an arrow. He barked loudly, and notwithstanding the distance the sportsmen heard him clearly. The great distance to which sound travels in these low temperatures astonishes no less than the brilliancy of the constellations in the northern sky.

The hunters, guided by Duk's barking, followed on his tracks; they had to run about a mile, and arrived quite out of breath, for the lungs are soon suffocated in such an atmosphere. Duk was "pointing" about fifty paces from an enormous mass moving on top of an ice mound.

"We've got him," said the doctor, loading his rifle.

"And a fine one," added Bell, imitating him.

"It's a rum-looking bear," said Johnson, waiting till his companions had fired.

Duk barked furiously. Bell went up to within twenty feet and fired, but the animal did not seem to be hit, for it went on swinging its head. Johnson in turn advanced and, after taking a careful aim, he pressed the trigger.

"What," cried the doctor, "not got it yet? It's that cursed refraction. The bear's at least a thousand paces away."

The three ran rapidly towards the animal, which the firing had not disturbed; it looked enormous, and without thinking about the dangers of attacking it, they began to pride themselves on its conquest. At a reasonable distance they fired again; the bear, mortally wounded, gave a great leap and fell at the foot of the mound. Duk threw himself upon it.

"That bear wasn't hard to kill," remarked the doctor.

"Only three shots," Bell added disdainfully, "and he's down."

"It's very queer," commented Johnson.

"Unless we came just when it was dying of old age," laughed the doctor.

As they spoke, the sportsmen arrived at the mound, and, to their amazement, they found Duk with his fangs buried in the body of a white fox.

"Well, that's a fine thing !" cried Bell.

"We aim at a bear and kill a fox," the Doctor added.

Johnson did not know what to say.

"Why !" said the Doctor, with a roar of sardonic laughter, "it's the refraction again!"

"What do you mean, Dr. Clawbonny?"

"Why, it fooled us about the size just as it did about the distance. It made us see a bear in a fox's skin. Well, other hunters have done the same—it comes of having too vivid an imagination."

"Still," answered Johnson, "now we've got him, we'll eat him."

But as he was going to lift the fox on to his shoulders, he shouted "Just look at this!"

"What is it?" asked the Doctor.

"Look, Dr. Clawbonny, look: it's got a collar on its neck!"

"A collar?" echoed the doctor, leaning over the animal. Yes, a collar half worn-out encircled its neck, and he thought he saw something engraved on it; he took it off and examined it.

"Whatever's that?" asked Johnson.

"It means, friends, that we've hit a fox twelve years old—it was one of those which James Ross caught in 1848."

"Is that possible?" cried Bell.

"There's not a doubt about it, and I'm sorry we've shot the poor beast. While he was wintering James Ross caught a lot of white foxes in his traps, and had brass collars put round their necks engraved with the whereabouts of his ships, the *Enterprise* and the *Investigator*, and his stores. These animals travel immense distances in search of food, and he hoped one of them might fall into the hands of some of the men in Franklin's expedition. That poor beast, which might have saved the lives of a ship's crew, has fallen quite needlessly under our shot."

"Well, we won't eat him," said Johnson, "especially as he's twelve years old. But we'll keep his skin as a memento." He lifted the animal on his shoulders, and guided by the stars they made their way to the ship; their expedition

was not quite fruitless, for they bagged several brace of ptarmigans.

An hour before they reached the *Forward*, the doctor was amazed to see a veritable shower of shooting-stars; they could be counted by thousands, like rockets in a firework display. They paled the moonlight, and the magnificent spectacle lasted several hours, as though the sky were holding a celebration for the earth's benefit. The doctor spent the whole night watching it, till it ceased, at seven in the morning, in the profound silence of the atmosphere.

CHAPTER XXVI

THE LAST LUMP OF COAL

It seemed certain that no bears were to be had, but several seals were killed during the next few days. On 6th November, the wind changed, and the thermometer rose several degrees; but the snow-storms became more violent than ever. It was impossible to leave the ship, and much effort was needed to keep out the damp: by the end of the week there were several bushels of ice in the condensers.

On 13th November, the weather changed again, and the thermometer went down to 24° below zero, the lowest temperature so far observed. This cold would have been bearable in calm air, but the strong wind seemed to fill the atmosphere with sharp knives.

The doctor was annoyed at being kept prisoner, for the snow-covered ground, hardened by the wind, made easy walking; he wanted to go farther afield.

But any violent exercise in a cold so intense made breathing difficult. A man could do only a quarter of his usual work; iron implements could not be touched; if one was handled without due precaution, it caused pain like that of a burn, and pieces of the skin were torn away and left sticking to it.

The crew, confined within the ship, were made to spend two hours walking on the covered deck, where they were allowed to smoke, as this was forbidden in the messroom. There, the moment the fire got low, ice invaded the walls and the joints in the flooring, and at once covered every bolt, nail, or piece of metal. The speed of its appearance amazed the doctor. The men's breath condensed in the air, instantaneously changing from a liquid to a solid state and fell round them in snow. Only a few feet from the stoves the cold was intense, and the men kept near the fire in a compact group.

The doctor advised them to accustom themselves to the temperature, which had not yet said its last word. He urged them to expose their skin to it a little at a time, and he

preached by example; but most of them were too idle or too benumbed to move, and they preferred to doze in the enervating heat. But, he told them, there was no danger in their exposing themselves to the intense cold when they went out of a warm room. These sudden changes of temperature are dangerous only to those who are perspiring, but the doctor's lessons were practically all thrown away.

As for Hatteras, he did not seem to feel the effects of the temperature. He walked about silently at his usual pace. Had the cold no influence on his energetic constitution? Or did he possess in a supreme degree the natural heat he wanted for his sailors? Was he so armour-plated by his one idea as to escape from his surroundings? His men were amazed to see him braving 24° below zero; he left the ship for hours together and returned without his face showing the slightest sign of the cold.

"He's a strange man," the doctor told Johnson; "he surprises even me. He's got one of the strongest natures that I've studied in all my life."

"It's quite true," Johnson answered, "he comes and goes and moves about in the open air without clothing himself any more warmly than if it were June."

"Oh! the clothing isn't so important," replied the doctor, "it's no use wrapping people up when they don't produce heat naturally. It's like trying to warm a piece of ice by swathing it in a blanket! But Hatteras doesn't need that; he's built that way, and I shouldn't be surprised if being beside him weren't as good as being near a stove."

Johnson, told to clear the water-hole every morning, noticed that the ice was over ten feet thick.

Almost every night the doctor could watch a magnificent aurora borealis: from four till eight in the evening the sky became slightly coloured in the north; then the colouring took the form of a pale yellow border, its ends resting on the ice-field. Little by little the brilliant zone rose in the sky, along the magnetic meridian, and seemed to be streaked with bands of darkness; jets of some luminous material, fluctuating in brilliance, shot out lengthways; when it reached its highest point the aurora might be formed of a number of arcs bathed in waves of red, yellow or green light. The spectacle was

dazzling. Soon the various curves of arcs met at one point, and formed in the north crowns of heavenly richness. At last the arcs merged, the splendid aurora faded, the intense rays melted into pale indeterminate indefinite gleams, and the marvellous display, now enfeebled and almost extinguished, faded into the dark clouds towards the south.

The wonder of such a spectacle under the high latitudes less than 8° from the Pole cannot be imagined; the aurora borealis visible in temperate regions gives no idea of it—not even a feeble one; it seems as if Providence wished to keep its most astonishing displays for the northern climates.

When the moon was visible, several mock-moons intensified her brilliance; often they were only haloes surrounding her as she shone from the centre of her luminous circle with a splendid brilliance.

On 26th November there was a high tide, and the water surged violently from the water-hole; the thick layer of ice was shaken by the rising of the sea, and sinister crackings announced the struggle; fortunately, the ship kept firm in her bed and only her anchor chains moved noisily: foreseeing this, Hatteras had had them strengthened.

The following days were even colder; it was hard to see whether its flurries began in the air or on the ice-fields: all was in an inextricable confusion.

The crew were busied with varied duties inside the ship, but chiefly with preparing the grease and oil obtained from the seals, this had frozen into solid blocks, which had to be smashed with axes into fragments as hard as marble, enough to fill ten barrels. Ordinary containers would have been useless, for any liquid they held would only have burst them when the temperature changed.

On the 28th the thermometer went down to 32 below zero; there was only enough coal for ten days, and everybody looked forward with dread to its disappearance.

Hatteras had the poop stove extinguished for economy's sake, and from then on Shandon, the doctor, and he stayed in the messroom. He was thus brought into continual contact with the men, who glared angrily at him. He could hear their reproaches, their recriminations, and even their threats, and he could not punish them. But he seemed deaf to

everything. He did not claim the place nearest the fire, but stayed in a corner, his arms folded, without saying a word.

In spite of the doctor's advice, Pen and his cronies refused to take the slightest exercise, they passed whole days leaning against the stove or crouching under the blankets in their hammocks. Their health soon began to suffer, they could not resist the fatal influence of the climate, and the dread scurvy appeared on board. Although some time before the doctor had begun to distribute lime-juice and lime pastilles every morning, these remedies, usually so efficacious, had imperceptible effects on the malady, which soon produced the most horrible symptoms. The sight of the sufferers, their nerves and muscles contracted with pain, was pitiable. Their legs swelled amazingly, and were covered with patches of black and blue, their blood-oozing gums and ulcerated lips gave passage only to inarticulate sounds: the vitiated and defibrinated blood could no longer take life to the extremities.

Clifton was the first to be attacked, soon Gripper, Brunton, and Strong had taken to their hammocks. Those whom the malady still spared could not escape the sight of the sufferers, they had nowhere else to go than the messroom, and it was soon transformed into a hospital, for in a few days, out of the eighteen sailors of the *Forward*, thirteen went down. Pen seemed able to escape contagion, preserved by his vigorous nature. Shandon felt the first symptoms, but they went no further, and exercise kept him in fairly good health.

The doctor nursed the invalids with the greatest devotion, and it distressed him to see suffering he could not alleviate. He did all he could to keep that wretched ship's company in good spirits, his attempts to reassure them, his philosophy, his stories, broke the monotony of those unhappy days, he read aloud to them, and his astonishing memory supplied him with a wealth of amusing anecdotes. The men who were healthy enough to sit around the stove listened eagerly, but the complaints and groans and despairing cries of the invalids sometimes interrupted him, and in the middle of a story he would again become the attentive and devoted doctor.

His own health kept good, he got no thinner, and he said it was a good thing for him that he was clad like a seal or a

whale, who, thanks to its thick coating of fat, easily supports the Arctic atmosphere.

Hatteras himself felt nothing, either physically or morally. Even the sufferings of his crew did not seem to touch him. Perhaps he would not let his face betray his emotions; but an attentive observer would have realized that a man's heart beat beneath the iron exterior. The doctor analysed him, studied him, but could not succeed in classifying that strange organization, that supernatural temperament.

The thermometer fell once more and the promenade on deck was deserted; the Esquimau dogs alone prowled up and down upon it, howling lamentably.

Someone was always kept on guard near the stove to keep up the fire; it was important not to let it go out. As soon as it got lower, the cold glided into the room; ice covered the walls; and the humidity, rapidly condensed, fell in snow upon the unfortunate occupants of the brig.

It was in the midst of these unutterable tortures that 8th December was reached. That morning the doctor went as usual to consult the outside thermometer. He found the mercury completely frozen in the bulb.

"Forty-four degrees below zero!" he cried in alarm.

And that very day the last lump of coal was thrown into the stove.

CHAPTER XXVII

CHRISTMAS

THEN came a moment of despair. The idea of death, and death from cold, appeared in all its horror; the last piece of coal burned away with a sinister crackling, and the temperature of the room fell noticeably. Johnson went to fetch some lumps of that other fuel provided by the marine animals, and fed it into the stove; he added some oakum, impregnated with frozen oil, and soon got the room warm. The smell of the grease was unbearable, but how could they get rid of it? They had to get used to it. Johnson himself admitted that his expedient left much to be desired, and would have no success in a Liverpool dwelling-house.

"Still," he added, "the smell may have some good effect."

"What's that?" asked the carpenter.

"It will attract the bears; they love the stink."

"And what do we want with bears?" added Bell.

"You know, Bell, we can't depend on the seals; they've gone, and for some time too; if the bears don't come to be turned into fuel I don't know what will become of us."

"You're right, Johnson; we're not out of it yet; our position is dreadful. And if that kind of fuel gives out—I don't see what——"

"There'd still be one way."

"One way?" asked Bell.

"Yes, Bell! for want of anything else—but never would the captain—but perhaps we'll have to."

Johnson shook his head sadly, and fell into a silent reverie, which Bell did not interrupt. He knew that their stock of grease, acquired with so much effort, would not last a week even with the strictest economy.

The boatswain was not mistaken. Several bears, attracted by the fetid smoke, appeared to leeward; the healthy members of the crew gave chase to them, but these animals are extraordinarily quick and alert for traps; it was impossible to get near them, and the most skilful shots could not touch them.

The ship's company was threatened with death from cold; the temperature which would invade the messroom could not be withstood for two days, and they all feared the end of the fuel.

At three in the afternoon on 20th December the dreaded moment arrived. The fire went out; the sailors grouped round the stove looked at one another with haggard eyes. Hatteras stayed motionless in his corner. The doctor strode up and down in distress; he was at his wits' end.

The temperature of the room fell suddenly to 7° below zero.

But if the doctor did not know what to do, some of the others did. Shandon, calm and resolute, and Pen, with an angry look in his eyes, and two or three of their comrades, still able to walk, went up to Hatteras.

"Captain!" Shandon addressed him.

Hatteras, wrapped in his thought, failed to hear.

"Captain!" Shandon repeated, touching his hand.

"Well, sir?" he said.

"Captain, our fuel's run out!"

"Well?" was all Hatteras said.

"If you mean us to die of cold, you'd better say so," said Shandon with bitter irony.

"What I mean," Hatteras replied gravely, "is for each of us here to do his duty to the end."

"There's something higher than duty, Captain," said the mate, "there's the right of self-preservation. I repeat that we've no firing, and if that goes on, in two days not one of us will be alive."

"I haven't any fuel," Hatteras replied in a dull voice.

"Very well, then," cried Pen violently, "if you haven't any wood, we'll cut it down where it grows!"

Hatteras grew pale with rage. "And where's that?" he asked.

"On board," the sailor answered insolently.

"On board!" echoed the captain, his fists closed, his eyes glinting.

As he spoke he seized an axe, and he raised it over Pen's head.

"You dog!" he cried.

The doctor rushed in front of Pen and thrust him away; the axe fell to the floor, sinking itself deeply into the wood. Johnson, Bell, and Simpson grouped themselves round Hatteras, and seemed determined to support him. But lamentable, agonized, plaintive voices arose from the bunks, now transformed into death-beds.

"The fire! Light the fire!" cried the poor fellows, nearly frozen under their blankets.

Hatteras made an effort to control himself, and after a few moments of silence he said calmly, "If we destroy our ship, how shall we get back to England?"

"We might burn some of her less essential parts, sir, the decking and the gunwale," Johnson suggested.

"Besides, we should still have the boats," answered Shandon; "and besides, what's to stop us from building a smaller vessel out of the remains of the old one!"

"Never!" Hatteras answered.

"But -" began several sailors, raising their voices.

"There's plenty of spirits of wine," Hatteras replied, "burn that to the last drop."

"Ah, we didn't think of that!" said Johnson, with affected cheerfulness, and by the help of large wicks steeped in spirits he succeeded in raising the temperature a few degrees.

During the days that followed this distressing scene the wind went back to the south, and the thermometer rose. Some of the men were able to leave the vessel when the air was not too damp, but ophthalmia and scurvy kept most of them on board; besides, neither fishing nor hunting was practicable.

But it was only a brief respite from the dreadful cold, and on the 25th, after an unexpected change in the wind, the mercury again vanished into the bulb of the thermometer; they were obliged to have recourse to the alcohol thermometer, which never freezes. The doctor found, to his horror, that it marked 66° below zero; never had men been able to support such a temperature.

The ice spread out in long tarnished mirrors on the floor; a thick fog invaded the messroom; the dampness fell like a thick snow. The men could no longer see one another; their feet and hands turned blue as the heat of the body left them; an iron band seemed to encircle their heads, and their thoughts

became confused, frozen, on the verge of delirium. Another frightful symptom: their tongues could no longer pronounce a word.

From the day when they had threatened to burn his ship, Hatteras paced the deck for hours at a time. He was on the look-out, and he looked out. This wood was his own flesh, and to cut a fragment off it was to cut off one of his limbs. He was armed, and he kept on guard, unaffected by the cold, the snow, and the ice, which stiffened his garments and enveloped him as though in granite armour. Duk barked and howled as though he understood.

But on 25th December, the captain went down to the mess-room. The doctor, using what little energy he had left, went up to him, and said, "Hatteras, we'll all of us die if we don't get some fuel."

"Never!" said Hatteras, knowing what he had in mind.

"You must," the doctor insisted gently.

"Never!" repeated Hatteras more emphatically still. "Never shall I agree! But they can disobey me if they want to!"

So they were to act; Johnson and Bell rushed on deck. Hatteras could hear the wood of his brig smashing, and tears came into his eyes.

That day was Christmas Day, the family festival of England, the evening for children's parties. But how bitter was the memory of the happy youngsters round the decorated tree! Who did not recollect the roast joint provided by the cattle specially fattened up? And the plum pudding, the mince pies, in which all sorts of dainties were mingled for that day so dear to the English heart? But here were sorrow, despair, extreme misery—and for the Yule log these fragments of wood hacked from a vessel lost in the depths of the glacial zone.

Still, the fire brought a little feeling and strength into the heart; the boiling tea and coffee produced an immediate effect, and so dear is hope to the human mind that the crew regained confidence. It was in such circumstances that there came an end to that dreadful year, 1860.

It was on the very 1st of January, 1861, that the doctor made an unexpected discovery. It was not quite so cold, and he had resumed his usual studies; he was reading Sir Edward

Belcher's account of his expedition to the Polar Seas. All at once a passage he had not previously noticed caught his eye. He read it again. No, there was no mistake.

Belcher relates that after reaching the end of Queen's Channel he had discovered important indications of the presence of men.

"They were the remains of habitations very superior to those which might be attributed to the wandering Esquimaux. The walls had foundations dug deep into the soil; the area inside, strewn with a thick layer of fine gravel, had been paved. Reindeer, seal, and walrus bones were visible in large numbers. And there we found some coal."

These concluding words inspired the doctor with an idea; he picked up his book and went to show it to Hatteras.

"Coal!" exclaimed the captain.

"Yes, Hatteras, coal—that means we're saved!"

"They couldn't have found coal on this deserted coast," Hatteras objected, "it can't be possible!"

"Why doubt it, Hatteras! Belcher wouldn't have said so if he hadn't been certain of it and seen it with his own eyes."

"But what about it, Doctor?"

"We aren't a hundred miles from the coast where Belcher saw the coal, and what is a hundred miles? Nothing. Longer journeys than that have often been made across the ice. Let's go, Captain!"

"We'll go," Hatteras had at once made up his mind and his quick imagination at once saw the hope of saving his ship.

Johnson was at once told of his decision, which he strongly approved of; he told his companions about it; some were pleased, others indifferent.

"Coal on these shores!" protested Wall, lying on his bed of pain.

"Let them go," answered Shandon cryptically.

But before Hatteras could begin his preparations for the journey, he wanted to be sure of the *Forward's* position. Once he had got away from the ship he could not find her without precise information.

He went up on deck and took at different times several lunar

distances and the heights of the principal stars as they crossed the meridian.

These observations were hard to make: in that low temperature the lenses of the instrument were covered with a layer of ice from his breath; more than once his eyelashes were burned as they touched the brass.

But he managed to get an exact basis for his calculations, and he came down below to make them. When this task was over, he raised his head in astonishment.

"What is it?" asked the doctor.

"What latitude were we in when we started wintering?"

"In latitude $78^{\circ} 15'$, longitude $95^{\circ} 35'$, exactly at the Pole of Greatest Cold.

"Well," said Hatteras, in a low voice, "our ice-field has been drifting! We're two degrees farther north and west, and at least three hundred miles from your store of coal!"

"And those poor fellows don't know that!" exclaimed the doctor.

"Hush!" said Hatteras, putting his finger to his lips

GETTING READY TO SET OUT

HATILRAS did not tell his crew where they were. This was as well; if they had known that they had been dragged farther north, they would probably have given themselves up to the madness of despair. The doctor understood his secrecy and approved of it.

The captain had hidden his own feelings: it was his first moment of happiness during the long months passed in endless struggle with the elements. He was 150 miles farther north, scarcely 8° from the Pole! But he hid his delight so profoundly that even the doctor did not suspect it; he was surprised to see an unmounted brightness in the captain's eyes; but that was all, and he never once suspected its reason.

The *Forward*, while getting nearer the Pole, had got farther away from the coal deposit seen by Sir Edward Belcher; instead of 100, this lay 250 miles to the south. Nevertheless the journey was to proceed. If Belcher was right—and there was no reason to doubt his veracity—they should find things just as he had left them, for no expedition had gone to these distant lands since 1853, and there were few or no Esquimaux to be met with so far north. They would not meet the same disappointment on the New Cornwall coast as they had on Beechey Island, so everything was in favour of this journey across the ice. It was expected that it would take at most forty days, and Johnson made his preparations accordingly.

The sledge was his first care; it was of the Greenland type, 35 inches wide and 24 feet long. (The Esquimaux often make them more than 50 feet long.) It was made of long planks, curved upwards at front and rear, and held in shape, much as a bow is, by two thick cords; this gave it increased resistance to shocks. It ran freely on the ice, but when crossing snow it was mounted on two runners to keep it off the surface. Rubbed, Esquimaux fashion, with sulphur and snow, it slid along with surprising speed.

Its team consisted of six dogs; in spite of their leanness they

did not appear to suffer from the cold; their buckskin harness, guaranteed by the Greenlanders of Uppernawick, was in good condition, and they could haul a load of 2000 pounds without being unduly fatigued.

The camping equipment consisted of a tent, for use if it proved impossible to construct an igloo, a mackintosh ground-sheet to keep the snow from melting in contact with the human body, and several blankets and buffalo-skins. The hallett boat was also taken.

The provisions consisted of 5 cases of pemmican, weighing about 450 pounds; allowing one pound of pemmican for each man and each dog. The expedition took 12 gallons of spirits of wine—weighing about 50 pounds—plenty of tea and biscuit, a portable stove with a supply of wicks, oakum, powder, ammunition, and two double-barrelled guns. They also used the indiarubber belts invented by Captain Parry, in which the warmth of the body and the action of walking keeps coffee, tea, or water from freezing.

Johnson was especially careful about the snow-shoes, a wooden pattern, fastened on with leather straps; when the ground was frozen hard they could be replaced by buckskin moccasins, and each traveller had two pairs of both.

These preparations were important, for any detail overlooked might lead to the loss of the expedition; they took four whole days. Each day, at noon, Hatteras took care to get his bearings; she was no longer drifting but he had to make sure of being able to get back. He then set about choosing the men to take with him; some would have been invaluable, but he had to consider those he was leaving. However, as the common safety depended upon the expedition's success, he decided to take only those whom he could rely on. He, therefore, excluded Shandon, who did not seem to regret this. James Wall was too ill to leave his bed. The sick had not got any worse, and as the only treatment was to rub them with lime-juice and dose them with it, it was not difficult to carry out, and did not need the doctor. He insisted on joining the expedition and no objection was made to this.

Johnson greatly wished to accompany the captain in his perilous enterprise, but Hatteras took him aside, and said affectionately: "Johnson, I can trust nobody but you. You

are the only officer in whose hands I can leave my ship. I have to know you're there to keep an eye on Shandon and the others. They are held prisoners here by the winter, but who knows what they're capable of? You will be given my formal orders, which, if necessary, will put you in command. You will take my place. We shall be away for four or five weeks at the most, and I shan't be anxious, knowing you are where I myself can't be. You must have wood, Johnson, I know, but as much as you can, spare my poor ship. You understand me, Johnson?"

"I understand, Captain," the old sailor answered, "I'll stop, as you need me here."

Hatteras thanked him with a handshake, adding: "And if we don't get back, wait for the ice to break up, and try to push forward towards the Pole. But if the others refuse, never mind us, but take the *Forward* back to England."

"That's what you want, Captain?"

"Yes, that's what I want," answered Hatteras.

"Your orders shall be obeyed," said Johnson simply.

The doctor regretted parting with his friend, but he had to admit that Hatteras did well to leave him. The other companions were Bell the carpenter and Simpson. The former, in good health, brave and devoted, would give yeoman service in camping on the snow. Simpson, though less reliable, might be useful both as hunter and fisherman; he agreed to take part in the expedition. This, therefore, consisted of four men: Hatteras, Clawbonny, Bell and Simpson, and seven dogs; the provisions had been calculated accordingly.

During the first days of January, the temperature kept at an average of 33° below zero. Hatteras waited impatiently for the weather to change; he frequently consulted the barometer, but it is of little use in such high latitudes, where Nature makes startling exceptions to the general rules. Here a clear sky does not always bring cold, and the snow need not make the temperature rise; the barometer is uncertain, as polar explorers had long realized: it falls with the north and east winds; when low, it brings fine weather; when high, snow or rain. Its indications could not be relied upon.

At last, on 5th January, the eastern wind brought a rise in temperature and the mercury rose to 18° below zero. Hatteras

decided to start next day; he could not bear to see his ship burnt piece by piece before his eyes: all the poop had already gone into the stove.

On the 6th, then, in the midst of flurries of snow, the order to set out was given. The doctor gave his last instructions about the sick; Bell and Simpson silently shook hands with their comrades. Hatteras had meant to say his good-byes aloud, but he saw himself surrounded by evil looks, and fancied he saw an ironical smile on Shandon's lips, so he kept silent. As he glanced at the *Forward* he may perhaps have hesitated for an instant, but it was too late to turn back; the sledge, loaded and harnessed, was waiting on the ice-field.

Bell went ahead, the others followed. Johnson accompanied the travellers for a quarter of a mile, then Hatteras asked him to return on board and the old sailor went back after a long farewell gesture.

Then Hatteras turned to give a last look towards the brig, and saw the tips of her masts disappearing among the dark clouds of the sky.

ACROSS THE ICE

THE little group went down towards the south-east. Simpson directed the dog team, zealously helped by Duk, who did not seem at all surprised to see his companions at work. Hatteras and the doctor came behind, whilst Bell went on in front, sounding the ice with his iron-shod stick.

The rise of the thermometer indicated that snow was coming: soon it was falling in thick flakes and adding to the difficulties of the journey; it made the travellers deviate from the straight line, and go more slowly, but they could expect to average three miles an hour. The surface of the ice, contorted by movements of the ice-field, was uneven and the sledge often lurched about and sometimes seemed likely to overturn; but they kept it upright.

Hatteras and his companions were swathed in skins, tailored in Greenland style, more useful than elegant. Hoods shielded their heads and faces from the wind and snow, their mouths, eyes, and noses alone coming into contact with the air. Nothing is more uncomfortable than collars or nose-shields fringed with ice: they would have to be taken off with the help of an axe—an awkward way of undressing. An opening had to be left for the breath or it would have frozen at once.

The interminable plain stretched on with wearisome monotony; mounds of ice much the same everywhere and hummocks whose irregularities ended up making them look alike; blocks cast in the same mould, and icebergs between which wound tortuous valleys. The travellers marched on, compass in hand. They spoke little, for it is painful to open the mouth in such an atmosphere; sharp ice-crystals at once form between the lips, nor is the breath warm enough to melt them. Bell's footsteps were plainly marked in the soft layer, and the others followed them carefully, certain of being able to go where he had gone.

Numerous traces of bears and foxes crossed their path, but not one of these animals was seen that day. To hunt them

would have been dangerous and useless, for the sledge was heavily loaded. In this kind of journey travellers usually leave food depots along their route buried in the snow, out of the reach of the animals; they unload on the way outwards and pick up the food as they return. But on these shifting ice-fields Hatteras could not use this method, and the uncertainty of the route made it doubtful whether they could return the same way.

At noon he halted his followers under the shelter of a wall of ice. Their breakfast consisted of pemmican and boiling tea, which greatly comforted them. After an hour's rest they set out again.

On the first day they walked about twenty miles, and in the evening both men and dogs were exhausted. In spite of their fatigue, however, they had to build an igloo to pass the night in: this took about an hour and a half. Bell showed himself very skilful: he cut out blocks of ice and piled them up in a dome; a large block at the top made its key-stone. Snow served as mortar and filled up the chinks, where it soon hardened, turning the whole structure into a solid block of ice. This was entered by a narrow opening, through which the doctor squeezed himself painfully, and the others followed him.

The supper was quickly cooked with spirits of wine. The temperature inside the igloo was quite bearable, as the wind which raged outside could not penetrate it. The doctor amiably invited them to the meal, and when this was over all they thought about was sleep. A mackintosh, spread over the floor, protected them from the damp. Their stockings and shoes were dried at the portable stove, and then three of them wrapped themselves in their blankets, leaving the fourth to keep guard over the common safety, and keep the opening from getting blocked up, for if it did they would be buried alive.

Duk shared the dwelling, the other dogs stayed outside, and after having fed they buried themselves under the snow, which covered them completely.

The fatigues of the day soon brought sleep. When the doctor went on duty at three in the morning, the storm was raging. What a queer position, to be buried in this tomb, whose walls thickened in the tempest!

Next day, at six, they resumed their monotonous march: always the same valleys and icebergs, whose similarity made finding the way difficult. The temperature fell several degrees, and made walking easier by freezing the snow. They often met with mounds looking like cairns or like the hiding-places made by the Esquimaux. The doctor had one demolished, and found nothing but a block of ice.

"What did you expect, Clawbonny?" asked Hatteras. "Aren't we the first men ever to set foot here?"

"Quite likely, but who knows?" answered the doctor.

"We won't waste time in useless investigations," continued the captain; "I want to get back to my ship quickly, even if we don't find the fuel."

"I feel quite certain about that," the doctor told him.

"I often wish I hadn't left the *Forward*," Hatteras said more than once, "a captain's place is on board."

"Johnson's there."

"Of course, but let's get on! Let's get on!"

The team hastened forward; Simpson urged on the dogs with his cries. Because of a phosphorescent effect the ground they were running across seemed to be burning, and the sledges to be raising a dust of sparks.

The doctor went on in front to examine the condition of the snow, but all at once, as he was jumping over a hummock, he disappeared. Bell, who was nearest to him, ran forward.

"Dr. Clawbonny," he shouted anxiously, "where are you?"

"Doctor!" the captain yelled.

"Here, down a hole," answered a reassuring voice; "let down a rope and I'll get back to the surface."

They lowered a rope to the doctor, who was down a hole about ten feet deep; he fastened it round his waist, and his companions hauled him up, not without difficulty.

"Are you hurt?" asked Hatteras.

"Not a bit; it wasn't dangerous," answered the doctor, shaking the snow off his face good-humouredly.

"But how ever did you do it?"

"Oh, it was the refraction," he answered, laughing. "I thought I was stepping across a gap a foot wide, and I fell into a hole ten feet deep! Oh, these optical illusions—they're the only ones I have left, but I'll never get used to them. That

will teach you not to move a step before you've sounded it, for we can't rely on our senses in this enchanted land."

"Can we get on?" the captain wanted to know.

"Get on, Hatteras, by all means; that tumble has done me more good than harm."

By evening the travellers had covered twenty-five miles, they were worn out, but this did not keep the doctor from climbing up an iceberg while the igloo was built.

The moon, still almost full, shone with extraordinary brilliance in the clear sky, the stars were amazingly bright. From the top of the iceberg the view extended over an immense plain, bristling with ice-mounds of bizarre forms. To see them gleaming under the moonbeams which threw their outlines into relief against their shadows, like upright columns, like overthrown pillars, like sepulchral stones, recalled a vast cemetery, treeless, silent, endless, in which twenty generations of all mankind might easily have lain in their eternal sleep.

In spite of the cold and his own weariness, the doctor long remained in contemplation of the spectacle, and his companions had much trouble to get him away. But they had to think about rest; the igloo was ready, the four companions burrowed into it like moles, and were not slow in falling asleep.

The next day and the following ones passed without any special incident; the journey was easy or difficult, fast or slow, according to the weather, now bitter and icy, now damp and penetrating their show-shoes, according to the nature of the ground.

By 15th January, the moon, in her last quarter, was visible only for a short time; the sun, though always hidden below the horizon, gave six hours of a sort of twilight, not bright enough to show the way: they had to mark it out with stakes in the direction given by the compass. Bell led the way, Hatteras followed some way behind him, then Simpson and the doctor took turns so as to see only Hatteras, so that they all kept in a straight line. But in spite of all their precautions, they sometimes deviated thirty or forty degrees; they then had to stake it out again.

On Sunday, 15th February, Hatteras estimated he had gone 100 miles south; the morning was consecrated to the mending of the clothing and the camp gear: Divine Service was not

forgotten. They set out again at noon; the weather was cold and the thermometer marked 32° below zero in an exceedingly clear atmosphere.

All at once, without warning of any kind, a frozen vapour rose from the ground; it reached a height of about ninety feet, and remained motionless. The travellers could not see a foot before them: the vapour clung to their clothing, making it bristle with icicles. Taken unawares by the frost-rime, they all had the one idea—that of keeping together: they shouted, "Hullo, Simpson!" "This way, Bell!" "Doctor!" "Where are you, Captain?"

The four of them groped with outstretched arms in the thick fog, which allowed nothing to be seen. What most alarmed them was that no answers were to be heard: the vapour did not conduct sound.

They fired to give a rallying signal, but if the sound of a voice seemed too weak, the explosion of the firearms was too strong, for the echoes seized upon it; repeated on every side, it produced a confused rumble with no definite direction.

Each of them then followed to his own instinct. Hatteras stopped, folded his arms and waited. Simpson was satisfied, not without difficulty, to keep near the sledge. Bell retraced his steps, feeling the footprints with his hands. The doctor ran hither and thither, bumping against the icebergs, falling down, getting up again, confusing his tracks and getting ever more completely lost.

After five minutes he said: "I can't go on like this! What a weird climate! You can't rely upon it, not to speak of the icicles cutting my face. Hi, Captain!"

But he got no answer; he fired his gun and, in spite of his thick gloves, he burned his hand on the trigger. Meanwhile he thought he could see a confused mass moving a few paces away.

"At last!" he said. "Hatteras! Bell! Simpson! Is that you? Answer, do!"

A dull growl was the only reply.

"Whatever's that?" wondered the doctor. The mass came nearer, and its outline could be more clearly seen. A terrible thought crossed the doctor's mind: "A bear!"

It was a large bear; lost in the fog, it went to and fro, and

kept threatening to bump into the men whose existence it did not suspect.

"That makes things difficult!" thought the doctor, suddenly halting.

Sometimes he smelt its breath; sometimes he saw its enormous paws beating the air, so close to him that his clothing was rasped by its sharp claws. He jumped back, and the mass disappeared like a phantom.

But as he moved he felt the ground rising under his feet; climbing on all fours, he got to the top, first of one block, then of another, feeling about with his stick.

"An iceberg!" he said to himself: "if I can get to the top I'll be saved."

He climbed to a height of about eighty feet; his head was higher than the frozen fog, whose upper surface ended abruptly.

"Good," he said, and as he looked round he saw the heads of his three companions emerging from the thick fluid.

"Hatteras!"

"Doctor Clawbonny!"

"Bell!"

"Simpson!"

The four names were all shouted at the same time; the sky, lit up by a magnificent halo, threw pale rays which coloured the frost-rime as though it were a cloud, and the summits of the icebergs seemed to emerge from a sheet of liquid silver.

The travellers found themselves less than 100 feet apart. Thanks to the purity of the frost-cold air, they could hear each other distinctly and could converse from the top of their icebergs.

After firing their shots and getting no reply, they had all thought it best to climb above the fog.

"The sledge!" shouted the captain.

"It's eighty feet below us," Simpson answered.

"In good condition?"

"In good condition."

"What about the bear?" asked the doctor.

"What bear?" queried Bell.

"The bear I met—it nearly cracked my skull."

"A bear!" exclaimed Hatteras, "we must get down."

"If we do we'll only get lost again," said the doctor.

"But if it attacks our dogs!"

Then Duk could be heard barking in the fog.

"That's Duk," exclaimed Hatteras; "there's something wrong; I'm going down."

Furious howlings arose from the fog in a fearful chorus, like a terrible humming in a wadded room. There, in the depths of that thick mist, an invisible battle was taking place, and the vapour heaved like a sea convulsed by submarine monsters.

"Duk! Duk!" cried the captain, going down into the frost-rime.

"Wait a minute, Hatteras; I think the fog's clearing off," called the doctor.

It did not clear, but its level fell like the water of a pond that is being emptied; it seemed to sink into the ground whence it sprang. The gleaming crests of the icebergs rose above it; others, hitherto submerged, appeared like newly-formed islands; an optical illusion made the travellers seem to be rising on their icebergs into the air.

Soon the top of the sledge appeared, then the dogs, then about thirty other animals, then some great moving shapes. Duk was leaping about, his head alternately rising out of the fog and plunging back into it.

"Foxes!" cried Bell.

"Bears!" shouted the doctor. "One, two—five of them."

"Our dogs! Our food!" cried Simpson.

A pack of foxes and bears had attacked the sledge, and were making havoc with the food. The instinct of piety united them; though the dogs barked furiously, the pack took no notice of them and the destruction continued.

"Fire!" cried the captain, firing his rifle. His companions copied him. On hearing the quadruple detonation the bears lifted their heads, and with a comical growl gave the signal for departure; they went faster than a horse could gallop, and, followed by the pack of foxes, had soon disappeared amongst the icebergs to the north.

CHAPTER XXX

THE CAIRN

THE frost-rime had lasted about three-quarters of an hour, quite long enough for the bears and foxes to help themselves to the food which had come just as they were perishing with hunger from the long winter. The sledge covering ripped away by their great claws, the cases of pemmican torn open and half empty, the bags of biscuit pillaged, the stock of tea spread over the snow, a barrel of spirits of wine broken up, and its precious contents wasted, the camping-gear scattered and smashed, all bore witness to the ferocity of these wild beasts, their torments of hunger, and their insatiable appetite.

"That's a bit of bad luck!" said Bell, as he surveyed the scene of desolation.

"And nothing to be done about it!" replied Simpson.

"Let us see how much we've lost first," said the doctor, "we can talk about it later."

Hatteras said nothing, but began collecting the scattered containers. The explorers hunted out all the pemmican and biscuit that was still eatable. The loss of so much of the spirits of wine was deplorable, as without it there would be no hot drinks, neither tea nor coffee. When he had made an inventory of the provisions that still remained the doctor found that they had lost 200 pounds of pemmican and 150 pounds of biscuit; if the travellers were to push on they would have to put themselves on half-rations.

They argued about what should be done in such circumstances. Should they return to the brig and start their expedition afresh? But how could they relinquish the 150 miles already covered? And to return without the fuel would have the worst effect on the crew. Would they find anyone determined enough to begin such a journey again? Clearly the best thing to do was to go on, even at the cost of the hardest privations.

None the less, Simpson wanted to go back, for the fatigues of the journey had impaired his health and he was visibly

getting weaker, but at last, seeing he was alone in his opinion, he took his place at the head of the sledge, and the little group pushed on towards the south.

During the next three following days, from 15th to 17th January, the monotonous incidents of the journey recurred. The men went more slowly, they tired more easily, their legs were getting feeble, and the dogs hauled the sledge with greater difficulty. The insufficient food was telling upon them. The weather changed with its usual fickleness, jumping from intense cold to damp penetrating fogs.

On 18th January the appearance of the ice-field changed suddenly. Many pyramid-like peaks, ending in a sharp point at a great height, rose on the horizon. Here and there the ground was visible through the layer of snow, it seemed to consist of gneiss, schist and quartz, with indications of calcareous rock. At last the travellers had reached terra firma, by their calculations it must be New Cornwall.

The doctor was delighted to tread on solid ground once more, they had only 100 more miles to go to reach Cape Belcher, but it was more fatiguing to cross this irregular surface, full of sharp-pointed rocks, sudden drops, crevices and precipices. They had to go far inland to climb the lofty cliffs along the coast, and to cross narrow gorges, in which the snow was piled up to a height of thirty or forty feet.

The travellers regretted the level surface they had left, almost continuous and easy to cross, the ice-field so well-suited to sledge travel. Here they had to haul with all their might. The wearied dogs were not sufficient, the men were harnessed beside them, and wore themselves out helping them. They had often to unload the sledge so as to cross the jagged hills, whose frozen surface gave no hold to the runners. Sometimes it took hours to cross a distance of ten feet. On the first day they made barely five miles on what was so aptly named after Cornwall.

Next day the sledge reached the top of the cliffs, the travellers were too exhausted to build an igloo, and had to pass the night under the tent, wrapped in their buffalo-skins, and drying their wet stockings by placing them on their own chests. The results may well be imagined. During the night the thermometer went down to 44° below zero, and the mercury froze.

Simpson's health became alarming; an obstinate cold, violent rheumatism, and intolerable pain forced him to lie down on the sledge, which he could no longer steer. Bell took his place; he, too, was ill, but not ill enough to give in. The doctor also felt the influence of this terrible winter journey, but not a complaint escaped his lips; he strode along in front, leaning on his stick; he chose the route, he helped in everything. Hatteras, unmoved, cryptic, insensitive, his iron constitution as sound as on the first day, followed the sledge in silence.

On 20th January the weather was so bad that the slightest effort caused immediate prostration; but the difficulties of the ground became so great that the doctor, Hatteras and Bell harnessed themselves along with the dogs; the front part of the sledge was broken by an unexpected blow, and they had to stop and mend it.

Such delays occurred several times a day. The travellers were journeying along a deep ravine up to their waists in snow, and sweating in spite of the bitter cold. Not a word was said, but suddenly Bell looked at the doctor in alarm, picked up a handful of snow, and began to rub his companion's face with all his might.

"What the deuce, Bell?" protested the doctor, struggling.

But Bell went on rubbing away.

"Look here, Bell, you've filled my eyes and nose and mouth with snow. Have you gone mad? What's up?"

"Anyhow," Bell replied, "if you've still got a nose left, you owe it to me."

"A nose?" asked the doctor, putting his hand to his face.

"Yes, Dr. Clawbonny, you were badly frost-bitten; your nose had got quite white when I looked at you, and without my energetic treatment you'd have lost an ornament which may be a nuisance travelling, but which it's useful to have."

"Thanks, Bell," said the doctor; "I'll do the same for you."

"I hope you will, Dr. Clawbonny, and I only wish we had nothing worse to look out for!"

"You mean Simpson? Poor fellow, he's suffering dreadfully!"

"Are you anxious about him?" asked Hatteras urgently.

"Yes, Captain," answered the doctor.

"What are you afraid of?"

"A violent attack of scurvy. His legs are swelling already, and his gums have been attacked; there the poor fellow is, lying half-frozen under his blankets on the sledge, and every shock increases his pain. I'm sorry for him, but I can't do anything about it!"

"Poor old Simpson," exclaimed Bell.

"Perhaps we'd better stop a day or two," suggested the doctor.

"Stop!" exclaimed Hatteras, "when the lives of eighteen men depend upon our getting back?"

"But——" protested the doctor.

"Clawbonny, Bell, listen to me," Hatteras told them, "we've only got enough food left for seventy days. We can't lose an instant!"

Neither the doctor nor Bell could answer that, and the sledge went on its way.

In the evening they stopped at the foot of a mound of ice in which Bell soon cut a shelter; the travellers took refuge in it, and the doctor spent the night nursing Simpson; the wretched man was a prey to the scurvy, and constant groans issued from his swollen lips.

"Oh, Dr. Clawbonny!"

"Cheer up, my boy," the doctor encouraged him.

"I shall never get over it. I wish I were dead!"

To these words of despair the doctor replied only by incessant attention. Though himself half-dead with fatigue, he spent a part of the night in making the sick man a soothing draught. Already the lime-juice was losing its effect and did not keep the scurvy from spreading.

Next day they had to lift the poor fellow on to the sledge, though he begged them to leave him alone to die in peace. Then their painful march began once more.

The freezing mists wet the three men to the skin; the snow and sleet whipped their faces, they did the work of beasts of burden, with not even enough food to eat. Duk ran hither and thither, as alert as his master, discovering by instinct the best route to follow. During the morning of 23rd January, during almost complete darkness, for it was new moon, Duk ran on ahead and was lost to sight for several hours. Hatteras grew anxious, as there were many bear-tracks on the ground,

and he was wondering what to do, when he heard a loud barking.

The sledge was hauled along more quickly and soon the faithful animal was found in the depths of a ravine. Duk was "pointing", as motionless as if he had been petrified, towards a sort of cairn, made of lumps of limestone, and covered with a cement of ice.

"This time," said the doctor, as he freed himself from the traces, "it really is a cairn; there's no mistake about it."

"What's that got to do with us?" Hatteras wanted to know.

"Why, if it is a cairn, there may be some document in it we'd find useful—even some provisions, perhaps—so it's worth while looking."

"And what Europeans have got as far as this?" asked Hatteras, shrugging his shoulders.

"But if there aren't any Europeans, maybe the Esquimaux have hidden their food in it. They often do that, I'm told."

"Well, you can look if you like, Clawbonny, but I'm afraid you won't get much for your trouble."

Clawbonny and Bell took their pickaxes, while Duk kept on barking furiously. The cairn was soon demolished, and a cavity found in it; in the cavity was a damp paper. Hatteras hurried up, took the document and read:

"Altam . . . *Porpoise*, Dec. 13th . . . 1860
12° long . . . 8 . . . 35' lat . . ."

"The *Porpoise*!" said the doctor.

"The *Porpoise*," Hatteras repeated. "I don't know any ship of that name in these parts."

"It's clear," continued the doctor, "that some sailors, shipwrecked perhaps, have gone this way within the last two months."

"That's certain," agreed Bell.

"What are we to do?" asked the doctor.

"Keep on our route," Hatteras decided coldly. "I don't know anything about the *Porpoise*, but I do know that the *Forward* is waiting for us to get back."

THE DEATH OF SIMPSON

His journey went on, every mind was filled with new and unexpected ideas, for to meet other travellers so far north was one of the most important things that could happen. Hatteras frowned uneasily.

"The *Porpoise*?" he asked himself "What is that, a ship? And what's it doing so near the Pole?"

At this idea he shivered, but not from the cold. The doctor and Bell thought only of the result the discovery of this document might have to save or to be saved by their fellow-men. But the difficulties and obstacles they encountered soon made them oblivious to everything but their own position, now become so dangerous.

Simpson's condition grew worse, the doctor saw that death was near. He could do nothing, and he himself was suffering cruelly from a painful ophthalmia which, if neglected, might lead to blindness. The twilight gave them so much light that when reflected by the snow it pained the eyes, the reflection was difficult to guard against, for the glasses of spectacles got covered with a layer of opaque ice which obstructed the view. So much care was needed to look out for obstacles and to avoid them that the risk of ophthalmia had to be faced, so the doctor and Bell took it in turns to cover their eyes and to find the way.

The soil was volcanic, bristling and furrowed with inequalities, and this made it very difficult to haul the sledge, whose runners were getting worn out. To cross a mountain ridge the travellers had to climb 1500 feet, the weather was bitter, with squalls and flurries of snow. It was pitiful to see these poor wretches struggling through the desolation.

The uniform brilliancy of the snow produced almost a drunken giddiness and the ground seemed to be giving way beneath their feet, there was no definite point in the endless white. The travellers felt as if they were on a rolling ship, they could never get accustomed to this, and it ended by affecting

their heads. Their bodies were torpid, their minds benumbed, and they plodded on half in a dream. Then some unexpected shock, fall, or obstacle would arouse them up from their stupor, which a little later took possession of them again.

On 25th January they began to descend some steep slopes whose icy surface was even more wearisome. The least slip might send them down a precipice into gullies where they would have been hopelessly lost.

Towards evening an extremely violent tempest swept the snow-clad summits; unable to resist its violence, the travellers had to lie down on the ground, and the temperature was so low they risked being frozen to it.

With much difficulty Bell, aided by Hatteras, built an igloo, in which the poor wretches sheltered; there they shared a little pemmican and hot tea; only a few gallons of spirits of wine were left, and they had to be used for melting the snow, which cannot otherwise be used to quench the thirst. In warmer countries, where the temperature falls little below freezing-point, it is not harmful, but beyond the Polar circle it gets so cold that it can no more be touched than a white-hot iron; between the snow and the stomach there is so great difference of temperature that it produces suffocation. The Esquimaux would rather endure the greatest torments than slake their thirst with snow.

The doctor went on watch at three in the morning, when the tempest was at its height; he was sprawled in a corner of the igloo, when a lamentable groan from Simpson aroused him and on rising to go to the sufferer he bumped his head against the roof. Hardly noticing this he began to rub Simpson's swollen limbs; after about a quarter of an hour, when he tried to get up, he again bumped his head, although then he was only kneeling.

"That's very queer," he said to himself.

He raised his hand above his head, and felt that the roof was sagging.

"Good Lord!" he cried; "Hatteras! Bell!"

His cries awoke his companions, who got up at once, and they too bumped their heads; the darkness was complete.

"The roof's falling in!" the doctor shouted.

They hastened out, dragging Simpson with them; no sooner

had they left their dangerous ill-built retreat than it collapsed loudly, and they had to shelter under the tent covering, which soon got covered with a thick layer of snow; this, preventing their heat from being radiated away, kept them from being frozen alive.

The storm did not end until next day. When Bell harnessed the half-famished dogs, he found that some of them had started eating their leather harness, and that two were too ill to go much farther. But the caravan went on as best it could; there were still sixty miles to go.

On the 26th, Bell, who was going on ahead in front, gave a sudden shout. His comrades rushed up, and he pointed to a gun leaning against a block of ice.

"A gun!" exclaimed the doctor.

Hatteras examined it; it was loaded and in good condition.

"The men from the *Porpoise* can't be far off," the doctor remarked.

Hatteras noticed that the gun was of American make, and his hands gripped the frozen barrel convulsively.

"Get on! Get on!" he said heavily.

They pushed on down the mountain slope. Simpson seemed to have lost all feeling; he no longer had the strength to complain.

The tempest did not slacken, and the sledge went more and more slowly; they made only a few miles in twenty-four hours, and in spite of the strictest economy the provisions quickly diminished; but as long as they had enough for the return journey Hatteras kept on.

On the 27th they found a sextant half-buried in the snow, then a flask; this contained some brandy, or rather a lump of ice, with a ball of snow at its centre formed of the actual spirit; it was unusable. It was plain that Hatteras was unwillingly following in the trail of some disaster; they went on by the only practicable path, collecting the vestiges of some appalling shipwreck. The doctor searched carefully but in vain for more of the cairns.

Sad thoughts teemed in his mind. If they should meet with the survivors, what help could they give them? They themselves needed help; their clothes were in rags, and their food was giving out. If there were many survivors they would one

and all die of hunger. Hatteras seemed anxious to avoid them. . . . But mightn't he be right, as the fate of his whole crew depended upon him? Must he by helping strangers risk the safety of all?

But these strangers were men, maybe their fellow countrymen! However slight might be the chance of saving them, ought they not to try? He asked Bell what he thought, but got no reply; his own sufferings had hardened his heart. Clawbonny dared not question Hatteras, so he trusted in Providence.

Towards evening on the 27th Simpson seemed to be at the last extremity; his limbs already stiff and frozen, his difficult breathing forming a cloud round his head, his convulsive movements, foreboded his last hour. The expression on his face was terrible in its despair, and he cast looks of powerless anger at the captain. His accusations, silent but unmistakable, might well be deserved.

Hatteras avoided him and became more taciturn and wrapped up in himself than ever.

The following night was frightful; the tempest redoubled in violence; the tent was blown down three times, and the snow-drifts buried the poor wretches, blinded them, froze them, and stabbed them with sharp arrows wrenched off the surrounding icebergs. The dogs howled lamentably. Simpson lay exposed to the cruel atmosphere.

Bell again succeeded in raising the tent, which, though it did not protect them from the cold, at least kept out the snow. But a more violent gust blew it down a fourth time, and dragged it along in a flurry of snow.

"Oh, this is too much!" he cried.

"Courage, man, courage!" answered the doctor, clinging to him to keep themselves from being rolled down a ravine. Simpson's death-rattle sounded. Suddenly, with a last effort, he raised himself up and shook his fist at Hatteras, who looked at him fixedly; then he gave a fearful cry and fell back dead in the midst of his unuttered threat.

"He's dead!" cried the doctor.

"Dead!" repeated Bell.

Hatteras went towards the corpse, but he was driven back by the wind.

Poor Simpson was thus the first of the crew to be struck

down by the murderous climate, the first who would never reach home, the first to pay with his life, after untold suffering, for the captain's unreasonable obstinacy. The dead man had called him an assassin, but Hatteras did not quail beneath the accusation: yet a tear escaped from his eyes and froze on his pale cheek.

The doctor and Bell looked at him almost fearfully. Leaning on his stick, he seemed like the genius of the North, erect in the midst of the whirlwind, sinister in his frightful immobility.

He stood erect, without moving, until the first gleam of twilight; bold, tenacious, indomitable, and seeming to defy the tempest that roared around him.

CHAPTER XXXII

THE RETURN

THE wind died down about six in the morning, and, suddenly veering north, drove the clouds from the sky; the thermometer marked 33° below zero. The first rays of the sun reached the horizon, which they would gild a few days later.

Hatteras went up to his two disheartened companions, and said in low sad tones: "Friends, we're still more than sixty miles from the place Belcher mentions. We've barely enough food to get back to the ship. If we go on any farther, we shall meet with certain death, and that will do no good to anyone. We had better get back."

"That's a sound decision, Hatteras," the doctor answered, "I'd have followed as far as you wanted me to go, but we're every day getting weaker; we can scarcely put one foot before the other; I agree we ought to go back."

"Is that what you think, Bell?" asked Hatteras.

"Yes, Captain," answered the carpenter.

"Very well," said Hatteras; "we'll take two days' rest. That won't be too much. The sledge needs mending. I think we'd better build an igloo and try to get back our strength."

This settled, the three set vigorously to work. Bell took every precaution, and soon they had a good shelter at the bottom of the ravine where they had last halted.

It had cost Hatteras much effort to discontinue his journey. All that trouble and pain! A useless journey, which had cost the life of a man. To get back to the ship without any coal! What would Shandon do? But Hatteras could do no more.

Every preparation was made for the return journey. The sledge was repaired; it had now only 200 pounds to carry. They mended their clothes, worn-out, torn, soaked with snow and hardened by the frost; new moccasins and snow-shoes replaced those unfit for use. This work took all the 29th and the morning of the 30th; the three rested and consoled themselves as best they could.

During the thirty-six hours they spent in the igloo and on

the ice in the ravine the doctor noticed that Duk was behaving very strangely; he sniffed about a sort of mound, formed of several layers of ice; he kept whining, wagging his tail impatiently, and looking at his master and apparently trying to tell him something.

The doctor fancied that the dog's uneasiness might be caused by the presence of Simpson's body, which they had not yet had time to bury. He decided to perform the sad ceremony that very day; they had to start off early next morning.

So Bell and the doctor took their pickaxes and set off towards the lowest part of the ravine; the mound which Duk had indicated seemed to be a good place for the burial; they would have to make the grave deep to keep it from the bears. They began by removing the surface layer of soft snow, and then attacked the ice.

At the third blow of his pickaxe the doctor felt that he had broken something hard: taking up the pieces he found they were the fragments of a glass bottle; then Bell came across a hardened bag containing a few crumbs of biscuit.

"Hullo!" exclaimed the doctor.

"What's all this mean?" asked Bell, ceasing work.

They called Hatteras, who hurried over. Duk barked loudly, and began scratching at the ice.

"Have we found a food-store?" wondered the doctor.

"It's quite possible," answered Bell.

"Go on," said Hatteras.

Some remains of food were extricated, and a case a quarter full of pemmican.

"If it's a food-store," commented Hatteras, "the boxes have been here before us. See, the cases aren't intact."

"I'm afraid so," answered the doctor; "for——"

He was interrupted by a cry from Bell, who on lifting a heavy ice-block had come across a man's leg, stuffed and frozen, protruding through a cleft in the ice.

"A body!" cried the doctor.

"It isn't a food-store," Hatteras replied, "it's a grave!"

When the body was disinterred it proved to be that of a sailor, about thirty years old; it was perfectly preserved: he wore the clothing of an Arctic explorer. The doctor could not tell how long he had been dead. But then Bell discovered a

second body, that of a man of fifty, the mark of the suffering which had killed him still on his face.

"These weren't buried," exclaimed the doctor; "the poor fellows were overtaken by death just as we found them."

"You're quite right, Dr. Clawbonny," answered Bell.

"Go on! go on!" Hatteras told them.

Bell hardly dared obey; who knew how many human bodies the mound contained?

"These men were victims of the same accident that almost happened to us," explained the doctor. "Their igloo collapsed on top of them. Let's see if any of them are still breathing."

The place was soon cleared, and Bell dug out a third body, that of a man of forty, without the cadaverous look of the others. The doctor examined him and thought he recognized some signs of life.

"He's alive!" he shouted.

He helped Bell carry the body into the snow-house whilst Hatteras stood motionless, looking at the collapsed igloo. The doctor stripped the resuscitated man and found no trace of any injury. He and Bell rubbed him vigorously with oakum steeped in spirits of wine, and saw slow signs of returning consciousness; but the unfortunate man was completely prostrated and could not speak a word; his tongue was sticking to his palate as if it were frozen.

The doctor searched his pockets, but they were empty. He left Bell to continue the treatment, and went back to Hatteras. The captain had been down into the remains of the igloo and searched about carefully. He emerged holding a half-burnt fragment of an envelope, on which could still be read :

..... tamont

.....*orpoise*

.....w York.

"Altamont!" exclaimed the doctor, "of the ship *Porpoise*, from New York."

"An American," said Hatteras.

"I'll save him," said the doctor, "I'll take care of that, and then we'll know the answer to the riddle."

He went back to Altamont whilst Hatteras remained there,

wrapped in thought. Thanks to the care he gave him, the doctor succeeded in recalling the wretched man to life, but not to consciousness; he neither saw, heard, nor spoke, but anyhow he was alive!

Next morning Hatteras told the doctor: "We must set off at once."

"Yes. The sledge isn't fully loaded; we'll put the poor fellow on it and take him to the brig."

"Very well; but first we must bury these bodies."

The two unknown sailors were replaced under the ruins of their igloo, and Simpson's body took the place of Altamont. The three travellers paid their last respects to their companion, then at seven o'clock in the morning they set out again. Two of the dogs were dead, and Duk offered himself to help pull the sledge, working with all the determination of a Greenlander.

For the next twenty days, to 19th February, the return involved much the same incidents as before. But as it was now the coldest month of the winter all the ice had a hard surface. The travellers suffered terribly from the cold but not from snowstorms or the wind.

The sun reappeared for the first time on 31st January, and every day it stayed longer above the horizon. Bell and the doctor were at the end of their strength, almost blind and half-lame; the carpenter could not walk without crutches. Altamont was still alive, though completely unconscious. At times they despaired of him, but skill and care brought him back to life. The doctor tended him carefully, although he needed attention himself; he was getting ill with fatigue.

Hatteras thought of nothing but his ship. What condition would he find her in? What had happened to her? Had Johnson been able to withstand Shandon and his followers? The cold had been terrible. Had they burned the whole ship? Had they respected her masts and hull?

On 24th February he stopped dead. About 300 yards away appeared a red glow, above which a tall column of black smoke was lost in the grey clouds above.

"That smoke!" he exclaimed, his heart pounding as though it would burst.

"Look! Down there!" he shouted to his companions. "They're burning my ship!"

"We're still three miles away," replied Bell; "it can't be the *Forward*."

"Yes, it is," the doctor told him; "the mirage makes it seem nearer."

"Come on!" shouted Hatteras, rushing ahead of his companions.

The men, leaving the sledge to the care of Duk, hurried after him.

An hour later they came in sight of the ship. Horrible! She was burning in the midst of the ice, which was melting around her, and the south wind bore a fierce crackling sound to Hatteras.

Five hundred yards farther on a man was holding up his hands despairingly. He stood there, helpless before that fire which was wrapping the *Forward* in its flames.

That man was the only one there; it was old Johnson.

Hatteras hastened up to him. "My ship! My ship!" he cried in unrecognizable tones.

"Stop! Don't come a step further. Is that you, Captain?" replied Johnson.

"What's happened?" asked Hatteras, with a threat in his voice.

"Those wretches! They went off forty-eight hours ago, after setting fire to the ship."

"Curse them!" cried Hatteras.

A terrific explosion was heard; the ground shook; the icebergs collapsed upon the ice-field; a column of smoke rolled up into the clouds, and the *Forward*, blown up as her powder caught alight, vanished in a sheet of flame.

The doctor and Bell went up to Hatteras. He, lost in his despair, suddenly lifted his head:

"My friends!" he addressed them energetically. "The cowards have fled! The strong will succeed! Johnson and Bell, you have courage. Doctor, you have science. And I—I have faith. The North Pole is there. Let's get on with our work!"

His comrades gained renewed strength from these stirring words.

Yet it was a terrible situation for these four men, alone, with a half-dead companion, at 84° of latitude, in the depths of the regions around the Pole.